## List of Consumer Examples

DocID: EMAJ373L1EX.230

| Consumer Example Name   | Π                |                     |                  |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               |          |                        | Feat               | ure                           |                       |                               |               |                     |              |   |                    |                               |              |           |                     |                            |                   |                                |               |               |
|---|------------------|---------------------|------------------|---------------|----------|----------|-------|----------|-----------|-----|--------------------|--------------------|--------------------|-----------------|-----------------------|---------------|----------|------------------------|--------------------|-------------------------------|-----------------------|-------------------------------|---------------|---------------------|--------------|---|--------------------|-------------------------------|--------------|-----------|---------------------|----------------------------|-------------------|--------------------------------|---------------|---------------|
| Consumer Example Name   |                  |                     |                  |               |          |          |       |          |           |     |                    |                    | Т                  |                 |                       |               | Т        |                        | ·cut               |                               |                       |                               |               |                     |              |   |                    |                               |              |           |                     |                            |                   |                                |               |               |
|   | treaming request | unneling Connection | Snapshot request | Close request | Sineolo  | Priority | 3atch | iew      | ymbolList | am  | In Stream postring | Off Stream Posting | ending generic msg | eissue priority | eissue Pause & Resume | ser Disp      | Api Disp | iub Stream(Msg in Msg) | rogrammatic Config | ser Specified Config Location | pecify Admin messages | rogramatic Local admin domain | Smtes Decoder | orth( const Data &) | unnel stream | Ripple Fields                                     | Iorizontal Scaling | Authentication Token Handling | ogin Reissue | landleRTT | channel Information | ogin Domain Representation | ession Management | erviceEndpointDiscovery Helper | Auth2 JWT     | Warm Standby  |
|   |                  | 2                   | Sn               | Ö 8           | ô        | Pri      | Ba    | Vie      | Sy        | Pri | ő                  | 100                | Se                 | Re              | Re                    | $\rightarrow$ |          | ns ii                  | Pro                | ŝ                             | Sp                    | Pro                           | Rm            | ō                   | 2            | Rip   | 유                  | ۸                             | Log          | На        | Š                   | lo1                        | Se                | Sei                            | Pο            | N Y           |
| ex100_MP_Streaming  | Х                |                     |                  |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               | Х        |                        |                    |                               |                       |                               |               |                     |              |   |                    |                               |              |           |                     |                            |                   |                                |               |               |
| ex101_MP_QosPriority  | Х                |                     |                  |               | х        | Х        |       |          |           |     |                    |                    |                    |                 |                       |               | Х        |                        |                    |                               |                       |                               |               |                     |              |   |                    |                               |              |           |                     |                            |                   |                                |               |               |
| ex102_MP_Snapshot   |                  |                     | х                |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               | Х        | _                      |                    |                               |                       |                               |               |                     |              |   |                    |                               |              |           |                     |                            |                   |                                |               |               |
| ex110_MP_FileCfg  | Х                |                     |                  | _             | 4        | 4        | 1     |          |           | _   | _                  | 4                  | 4                  | 1               |                       |               | Х        | <b>)</b>               |                    | 4                             |                       |                               |               | 4_                  | <u> </u>     | <u> </u>  |                    |                               |              |           |                     |                            |                   | _                              | _             | —⊢            |
| ex111_MP_UserSpecifiedFileCfg                                 | Х                |                     |                  | _             | 4        | 4        | 1     | ш        | _         | _   | 4                  | 4                  | 4                  | 1               |                       |               | Х        | >                      |                    | Х                             | Ш                     | _                             | _             | 4                   | 4—           | 4—  | <u> </u>           | Щ.                            |              | Щ.        |                     | Щ                          |                   | ;                              | ;             | $\dashv$      |
| ex112_MP_TunnelingConnection                                  | Х                | X                   | Н                | _             | 4        | 4        | ₩     | ш        | 4         | 4   | 4                  | 4                  | 4                  | ₩               |                       |               | Х        | )                      |                    | 4                             | Н                     | _                             | 4             | 4                   | +-           | <del>                                      </del> | 1                  | ш                             |              | ш         |                     | Щ                          | ш                 | ┵                              | Х             | $\dashv$      |
| ex113_MP_SessionMgmt  | Х                | Х                   |                  | _             | 4        |          | _     | Ш        |           | _   | _                  |                    |                    | _               |                       |               | Х        | <b>)</b>               | ١.                 | 4                             |                       |                               |               | 4                   | 4            | <u> </u>  |                    |                               |              |           |                     |                            | Х                 |                                |               | <b>—</b>      |
| ex120_MP_FieldListWalk  | х                |                     |                  | _             | 4        | 4        | 1     | ш        | _         | _   | 4                  | 4                  | 4                  | 1               |                       |               | х        | _                      | _                  | 4—                            | Ш                     | _                             | _             | 4                   | 4—           | 4—  | <u> </u>           | Щ.                            |              | Щ.        |                     | Щ                          |                   | ;                              | ;             | $\dashv$      |
| ex130_MP_UserDisp   | Х                | <u> </u>            | Н                | _             | 4        | +        | ₩     | ш        | 4         | 4   | 4                  | 4                  | +                  | ₩               | Щ                     | х             | _        | 4                      | +                  | 4                             | Н                     | 4                             | _             | +                   | +-           | 1—  | 1                  | ш                             | $\Box$       | ш         |                     | Щ                          | ш                 | _                              | _             | $\dashv$      |
| ex140_MBO_Streaming   | Х                |                     | Н                | _             | 4        | 1        | +-    | Ш        | _         | _   | _                  | 4                  | 4                  | +-              | Щ                     |               | Х        | -                      | _                  | 1                             | Н                     | _                             | _             | 4                   | 1            | 1—  | 1                  |                               |              |           |                     |                            | $\vdash$          | _                              | _             | +             |
| ex170_MP_ChannelInfo  | Х                |                     |                  | _             | 4        | -        | -     |          | _         | _   | 4                  | _                  | 4                  | -               |                       |               | Х        | )                      |                    | 4                             |                       | _                             | _             | 4                   | +-           | <u> </u>  |                    |                               |              |           | Х                   |                            |                   | _                              | _             | —⊢            |
| ex180_MP_Websocket  | х                |                     |                  | _             | 4        | _        | -     |          | _         | _   | 4                  | _                  | 4                  | -               |                       | Х             | _        | )                      | 4                  | 4                             |                       | _                             | _             | 4                   | 4            | <u> </u>  |                    |                               |              |           |                     |                            |                   | _                              | _             | —⊢            |
| ex200_MP_Streaming  | Х                |                     |                  | _             | 4        | _        | -     |          | _         | _   | 4                  | _                  | 4                  | -               |                       |               | х        | _                      | _                  | 4                             |                       | _                             | _             | 4                   | 4            | <u> </u>  |                    |                               |              |           |                     |                            |                   | _                              | _             | —⊢            |
| ex210_MBO_Streaming   | х                |                     |                  | _             | 4        | _        | -     |          | _         | _   | 4                  | _                  | 4                  | -               |                       |               | Х        | _                      | _                  | 4                             |                       | _                             | _             | 4                   | 4            | <u> </u>  |                    |                               |              |           |                     |                            |                   | _                              | _             | —⊢            |
| ex220_MBP_PrivateStream                                       | Х                |                     |                  | _             | 4        | _        | -     |          | _         | Х   | 4                  | _                  | 4                  | -               |                       | Х             | _        | _                      | _                  | 4                             |                       | _                             | _             | 4                   | +-           | <u> </u>  |                    |                               |              |           |                     |                            |                   | _                              | _             | —⊢            |
| ex230_MBO_SwitchEntryAction                                   | х                |                     |                  | _             | 4        | _        | -     |          | _         | _   | 4                  | _                  | 4                  | -               |                       | Х             | _        | _                      | _                  | 4                             |                       | _                             | _             | 4                   | +-           | <u> </u>  |                    |                               |              |           |                     |                            |                   | _                              | _             | —⊢            |
| ex240_MP_RippleFields   | Х                |                     |                  | )             | <u> </u> | _        | -     |          | _         | _   | 4                  | _                  | 4                  | -               |                       | Х             | _        | _                      | _                  | 4                             |                       | _                             | _             | 4                   | +-           | Х   |                    |                               |              |           |                     |                            |                   | _                              | _             | —⊢            |
| ex250_Custom_Opaque   | Х                |                     |                  | _             | 4        | _        | -     |          | _         | _   | 4                  | _                  | 4                  | -               |                       |               | х        | _                      | _                  | 4                             |                       | _                             | _             | 4                   | +-           | <u> </u>  |                    |                               |              |           |                     |                            |                   | _                              | _             | —⊢            |
| ex270_SymbolList  | х                |                     |                  | _             | 4        | _        | -     |          | _         | _   | 4                  | _                  | 4                  | -               |                       |               | х        | _                      | _                  | 4                             |                       | _                             | _             | 4                   | +-           | <u> </u>  |                    |                               |              |           |                     |                            |                   | _                              | _             | —⊢            |
| ex280_MP_Perf   | Х                |                     |                  | <del>-</del>  | _        | +        | -     | $\vdash$ |           |     | -                  | 4                  | +-                 | -               | _                     |               | Х        | -                      | +                  | +                             |                       |                               | _             | +                   | +-           | ₩   | -                  |                               |              |           |                     |                            |                   |                                |               | $-\!\!\!+$    |
| ex290_Custom_Decode   | х                |                     |                  |               |          | +        | -     | $\vdash$ |           |     | -                  | 4                  | +-                 | -               | _                     |               | х        | -                      | +                  | +                             |                       |                               | _             | +                   | +-           | ₩   | -                  |                               |              |           |                     |                            |                   | $\rightarrow$                  | $\rightarrow$ | $-\!\!\!+$    |
| ex291_Custom_DownCast   | х                |                     |                  |               |          | +        | -     | $\vdash$ |           |     | -                  | 4                  | +-                 | -               | _                     | х             | _        | -                      | +                  | +                             |                       |                               | _             | +                   | +-           | ₩   | -                  |                               |              |           |                     |                            |                   | $\rightarrow$                  | $\rightarrow$ | $-\!\!\!+$    |
| ex300_MP_Close  | X                |                     |                  | X X           |          | +-       | 1     |          |           | -   | 4                  | +                  | +-                 | x               | _                     |               | х        | +                      | +                  | +-                            |                       | -+                            | _             | +-                  | +-           | ₩   | -                  | $\vdash$                      |              | $\vdash$  |                     |                            |                   | _                              | _             | $ \vdash$     |
| ex301_MP_PriorityChange                                       | X                |                     |                  | ,             | 4        | +-       | 1     |          | -+        | -   | +                  | +                  | +-                 | X               |                       | х             |          | +                      | +                  | +                             |                       | -+                            |               | +                   | +            | 1   |                    |                               |              |           |                     |                            |                   | $\rightarrow$                  | $\rightarrow$ | $-\!\!\!+$    |
| ex310_MP_Rmtes  | X                |                     |                  | ,             |          | +-       | 1     |          | -+        | -   | +                  | +                  | x                  | 1               |                       | х             | х        | +                      | +                  | +                             |                       | -+                            | х             | +                   | +            | 1   |                    |                               |              |           |                     |                            |                   | $\rightarrow$                  | $\rightarrow$ | $-\!\!\!+$    |
| ex320_Custom_GenericMsg                                       | X                |                     | $\vdash$         | +             | 4        | +        | +     | $\vdash$ |           | -   | +                  | +                  | - X                | +               | -                     | X             | -        | +                      | +                  | +-                            |                       |                               | -             | +                   | +            | 1   | -                  | _                             | -            | _         | _                   | $\vdash$                   | -                 | -                              | -             | +             |
| ex330_Login_Streaming   | X                |                     |                  | +             | +        | +        | ╁     |          | -         | -   | +                  | +                  | +                  | ╁               |                       |               | х        | +                      | +                  | +                             |                       | -+                            | -             | ╁                   | +            | +-  |                    |                               |              |           |                     |                            |                   | $\dashv$                       | $\dashv$      | $-\!\!\!+$    |
| ex331_Directory_Streaming<br>ex332_Dictionary_Streaming       | X                |                     |                  | +             | +        | ╁        | ╁     |          | -         | -   | +                  | +                  | +                  | ╁               |                       |               | X        | +                      | +                  | +                             |                       | -+                            | -             | ╁                   | +            | +-  |                    |                               |              |           |                     |                            |                   | $\dashv$                       | $\dashv$      | $-\!\!\!+$    |
| ex332_Dictionary_Streaming<br>ex333_Login_Streaming_DomainRep | X                |                     | $\vdash$         | -+            | +        | +-       | +     | $\vdash$ |           | -   | +                  | +                  | +                  | +               |                       | х             | ^        | $\dashv$               | +                  | +                             | $\vdash$              | -+                            | -             | +                   | +            | +   | +                  |                               |              |           |                     | х                          |                   | $\dashv$                       | $\dashv$      | -+            |
| ex333_Login_Streaming_Domainkep<br>ex340_MP_OnStreamPost      | X                |                     | Н                | )             | ,        | +        | t     | $\vdash$ | -+        | -+  | x                  | +                  | +                  | t               | H                     |               | х        | +                      | +                  | +                             | $\vdash$              | -+                            | -             | +                   | +            | +   | 1                  | $\vdash$                      |              | $\vdash$  |                     | _^                         | $\vdash$          | $\dashv$                       | $\dashv$      | +             |
| ex341_MP_OffStreamPost  | х                |                     |                  | ,             |          | +        | +     | $\vdash$ |           | -   | ••                 | х х                | +                  | +               |                       |               | X        | +                      | +                  | +                             |                       |                               | _             | +                   | +            | $\mathbf{t}$                                      | $\vdash$           |                               |              |           |                     |                            |                   | -t                             | -t            | -             |
| ex350_MP_PauseAll   | X                |                     |                  | +             | +        | +        | +     | $\vdash$ |           | -   | +                  | <u> </u>           | +                  | +               |                       | х             | ~        | +                      | +                  | +                             |                       |                               | _             | +                   | +            | $\mathbf{t}$                                      | $\vdash$           |                               |              |           |                     |                            |                   | -t                             | -t            | -             |
| ex360_MP_View   | x                |                     |                  | -             | +        | +        | +     | х        |           | -   | +                  | +                  | +                  | +               |                       | х             | _        | +                      | +                  | +                             |                       |                               | _             | +                   | +            | $\mathbf{t}$                                      | $\vdash$           |                               |              |           |                     |                            |                   | -t                             | -t            | -             |
| ex370 MP Batch  | Х                |                     |                  |               | $\top$   | 1        | х     |          |           | 1   | 十                  | 1                  | 1                  | 1               |                       |               | х        | 1                      | 1                  | 1                             |                       | _ †                           | _             | 1                   | 1            | 1   |                    |                               |              |           |                     |                            |                   |                                |               | -             |
| ex400_Custom_NestedMessaging                                  | х                |                     | П                | )             |          | T        | Ť     |          | _         | х   | +                  | +                  | t                  | t               |                       |               | X        | х                      | ✝                  | 1                             | П                     | 7                             | 1             | 1                   | 1            | 1   |                    |                               |              |           |                     |                            |                   | $\dashv$                       | $\dashv$      | $\neg$        |
| ex410 MP HorizontalScaling                                    | X                |                     | П                | - 1           |          | †        | t     | П        | 7         | 1   | T                  | 1                  | 1                  | t               |                       | х             | T        | $\top$                 | $\top$             | 1                             | П                     | 1                             | 1             | 1                   | 1            | 1   | х                  |                               |              |           |                     |                            |                   | $\dashv$                       | $\dashv$      | $\neg$        |
| ex420_MP_AdmDomainCfg   | х                |                     | П                | T             | T        | T        |       |          | 7         | 7   | 7                  | 1                  | T                  |                 |                       | х             | 1        | 1                      | T                  | 1                             | Х                     | 7                             | 7             | $\top$              | 1            |   |                    |                               |              |           |                     |                            |                   | $\neg$                         | $\neg$        | $\neg \vdash$ |
| ex421_MP_ProgrammaticCfg                                      | х                |                     | П                |               | 1        |          |       |          | 7         | 1   | T                  |                    | T                  |                 |                       |               | х        | 1                      | х                  |                               | П                     | 7                             | _             | $\top$              | 1            | 1   |                    |                               |              |           |                     |                            |                   | 一                              | 一             | $\neg$        |
| ex422_MP_ErrorClient  | х                |                     |                  |               | T        | 1        | 1     |          | T         |     | T                  | 1                  | T                  | 1               |                       |               | х        | 1                      | T                  | 1                             |                       | T                             | _             | 1                   | 1            | 1   |                    |                               |              |           |                     |                            |                   | 一                              | 一             | $\neg$        |
| ex423_MP_AdmDomainCfg_DomainRep                               | х                |                     |                  |               | T        | 1        |       |          | 寸         |     | T                  | T                  | T                  |                 |                       | х             | T        | T                      | T                  | T                             | Х                     | T                             |               | 1                   |              | i   |                    |                               |              |           |                     | Х                          |                   | 一                              | 一             |               |
| ex430_MP_Authentication                                       | Х                |                     |                  |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               | Х        |                        |                    |                               | Х                     | х                             |               |                     |              |   |                    | х                             | Х            |           |                     | х                          |                   | T                              | T             |               |
| ex440_System_TunStrm  | Х                |                     |                  |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               |          | х                      |                    |                               |                       |                               |               |                     | Х            |   |                    |                               |              |           |                     |                            |                   | T                              | T             |               |
| ex450_MP_QueryServiceDiscovery                                | Х                | Х                   |                  |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               | Х        |                        | х                  |                               |                       |                               |               |                     |              |   |                    |                               |              |           |                     |                            | х                 | Х                              | T             |               |
| ex451_MP_OAuth2Callback_V2                                    | Х                | Х                   |                  |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               | Х        |                        | Х                  |                               |                       | ⋾                             |               |                     |              |   |                    |                               |              |           |                     |                            | Х                 |                                |               |               |
| ex452_MP_OAuth2Callback_V2JWT                                 | Х                | Х                   |                  |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               | Х        |                        | Х                  |                               | Ш                     |                               |               |                     |              |   |                    |                               |              |           |                     |                            | Х                 | 团                              | Х             |               |
| ex460_MP_RTT  | Х                |                     |                  |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               | Х        | ×                      | <u> </u>           |                               | Ш                     |                               |               |                     |              |   |                    |                               |              | Х         |                     |                            |                   | 团                              | 团             |               |
| ex470_MP_WarmStandby  | Х                |                     |                  |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               | Х        |                        | Х                  |                               |                       |                               |               |                     |              |   |                    |                               |              |           |                     |                            |                   |                                |               | Х             |
| ex490_Specify_Dict_Object                                     | Х                |                     |                  |               |          |          |       |          |           |     |                    |                    |                    |                 |                       |               | Х        |                        |                    |                               | $\Box$                |                               |               |                     |              |   |                    |                               |              |           |                     |                            |                   |                                |               | )             |
| RRT Market Data Viewer  | Х                |                     | Х                | X X           | (        |          | Х     | Х        |           |     |                    |                    |                    | L               |                       |               | Х        |                        | Х                  |                               | Ш                     |                               |               |                     |              |   |                    |                               |              |           |                     |                            | Х                 | Х                              | I             |               |

|  | Structure                 |                            |                                      |                     |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|--|---------------------------|----------------------------|--------------------------------------|---------------------|---------------------------------------|-------------------------------------|--------------------------------------|--------------------------------|----------------------------------|---------------------|--|--|--------------------------|----------------|
| x x x Msg.ToString()                             | Msg->FieldList.ToString() | Map->FieldList->ToString() | Msg->FieldList                       | Msg->Map->FieldList | Nsg->Map(Action type, Key)->FieldList | Msg->Map(Sum,Key,Action)->FieldList | Msg->Map->FieldList->Primitive types | Msg-> FieldList or ElementList | Msg->Map->FieldList, ElementList | Msg->Msg->FieldList | Visg->ElementList->Vector->ElementList | Msg->Map->FilterList->ElementList or Map | Msg->Series->ElementList | Msg->OmmOpaque |
| Σ  | Σ                         | Σ                          | Σ                                    | Σ                   | Σ                                     | Σ                                   | Σ                                    | Σ                              | Σ                                | Σ                   | Σ                                      | Σ  | Σ                        | Σ              |
| X  | -                         | $\vdash$                   |                                      | H                   |                                       |                                     |                                      |                                | -                                | -                   |  | H  |                          | H              |
| X  | _                         |                            | _                                    |                     |                                       |                                     |                                      |                                |                                  |                     | _                                      | _  | _                        |                |
| X  |                           |                            |                                      |                     |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
| ÷  | _                         | _                          |                                      | -                   | _                                     |                                     |                                      |                                |                                  |                     |  | -  |                          |                |
| X  | _                         | _                          |                                      | -                   | _                                     |                                     |                                      |                                |                                  |                     |  | -  |                          |                |
| X  |                           | $\vdash$                   |                                      | Н                   |                                       |                                     |                                      |                                | _                                | -                   |  | Н  |                          | Н              |
| <del>-</del>                                     | х                         | $\vdash$                   |                                      | Н                   |                                       |                                     |                                      |                                | _                                | -                   |  | Н  |                          | Н              |
| <del>                                     </del> | X                         |                            |                                      | H                   |                                       |                                     |                                      |                                |                                  |                     |  | H  |                          | H              |
| <del>                                     </del> | <u> </u>                  | х                          |                                      | H                   |                                       |                                     |                                      |                                |                                  |                     |  | H  |                          | H              |
| х  |                           |                            |                                      | Н                   |                                       |                                     |                                      |                                |                                  |                     |  | Н  |                          | H              |
| X  |                           |                            |                                      |                     |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
| <u> </u>   |                           |                            | Х                                    |                     |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            | ^                                    | х                   |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            |                                      | х                   |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            |                                      | Ĥ                   | Х                                     |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            |                                      | х                   |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            |                                      |                     |                                       |                                     |                                      |                                |                                  |                     |  |  |                          | х              |
|  |                           |                            |                                      | х                   |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            | х                                    |                     |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            |                                      |                     |                                       | Х                                   |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            |                                      |                     |                                       |                                     | Х                                    |                                |                                  |                     |  |  |                          |                |
|  |                           |                            | Х                                    |                     |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            | Х                                    |                     |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            | X<br>X                               |                     |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
|  |                           |                            |                                      |                     |                                       |                                     |                                      | Х                              |                                  |                     |  |  |                          |                |
|  |                           |                            | X                                    |                     |                                       |                                     |                                      |                                |                                  |                     | Х                                      |  |                          |                |
|  |                           |                            | Х                                    |                     |                                       |                                     |                                      |                                |                                  |                     |  | Х  |                          |                |
|  |                           |                            | X                                    |                     |                                       |                                     |                                      |                                |                                  |                     |  |  | Х                        |                |
|  |                           |                            | Х                                    |                     |                                       |                                     |                                      |                                |                                  |                     | Х                                      |  |                          |                |
|  |                           |                            |                                      |                     |                                       |                                     |                                      |                                | X                                |                     |  |  |                          | Ш              |
|  |                           |                            |                                      |                     |                                       |                                     |                                      |                                | Х                                |                     |  |  |                          | Ш              |
| <u> </u>   |                           |                            | Х                                    |                     |                                       |                                     |                                      |                                |                                  |                     |  |  |                          | Ш              |
| <u> </u>   |                           | ш                          | Х                                    | Ш                   |                                       |                                     |                                      |                                |                                  | L                   |  | Ш  |                          | Ш              |
| <u> </u>   | <u> </u>                  | Щ.                         | Х                                    | Ш                   |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
| <u> </u>   |                           | ш                          | Х                                    | Щ                   |                                       |                                     |                                      |                                |                                  | Х                   |  |  |                          | Ш              |
| <u> </u>   | <u> </u>                  | Щ.                         | Х                                    | Ш                   |                                       |                                     |                                      |                                |                                  |                     |  |  |                          |                |
| <u> </u>   |                           |                            | X                                    | Щ                   | Щ                                     | Щ                                   | Щ                                    |                                |                                  |                     |  | Щ  |                          | Н              |
| <u> </u>   | -                         | $\vdash$                   | X<br>X<br>X<br>X<br>X<br>X<br>X<br>X | H                   |                                       |                                     |                                      |                                | -                                | -                   |  | H  |                          | H              |
| -  |                           | $\vdash$                   | X                                    | Н                   |                                       | $\vdash$                            | Н                                    |                                | _                                | -                   | _                                      | Н  | _                        | Н              |
| х  |                           | $\vdash$                   | X                                    | H                   |                                       |                                     |                                      |                                | -                                |                     | -                                      |  | -                        | H              |
| <u> </u>   | -                         | $\vdash$                   | X                                    | $\vdash$            |                                       |                                     |                                      |                                | $\vdash$                         | <u> </u>            | -                                      | $\vdash$                                 | -                        | H              |
| <del>-</del>                                     |                           |                            | X                                    | H                   |                                       |                                     |                                      |                                | -                                |                     | -                                      |  | -                        | H              |
| X  |                           | $\vdash$                   |                                      | Н                   |                                       |                                     |                                      |                                | _                                | -                   |  | Н  |                          | Н              |
| X  |                           | $\vdash$                   |                                      | Н                   |                                       |                                     |                                      |                                | _                                | -                   |  | Н  |                          | Н              |
| X  |                           |                            |                                      | H                   |                                       |                                     |                                      | х                              |                                  |                     |  | H  |                          | H              |
| Ê  |                           | $\vdash$                   |                                      | H                   |                                       |                                     |                                      | ^                              |                                  |                     |  | H  |                          | H              |
|  |                           |                            | х                                    | H                   |                                       |                                     |                                      |                                |                                  |                     |  | H  |                          | H              |
| <b>—</b>   |                           |                            | X                                    | Н                   |                                       | х                                   |                                      |                                |                                  |                     |  | Н  |                          |                |

## List of Non-Interactive Provider Examples

| Non-Interactive Provider Example Name |           |                      |                            |  |  |                                 |               |                    | Fe                          | eatui                      | re           |             |             |                     |                       |                     |                               |                     |               |
|---------------------------------------|-----------|----------------------|----------------------------|--|--|---------------------------------|---------------|--------------------|-----------------------------|----------------------------|--------------|-------------|-------------|---------------------|-----------------------|---------------------|-------------------------------|---------------------|---------------|
|                                       | Streaming | Tunneling Connection | Hardcoded Source Directory | Configurable Source Directory from EmaConfig.xml | Configurable Source Directory Programmatically | Submit Source Directory Message | Login Request | Dictionary Request | Directory Admin UserControl | Directory Admin ApiControl | UserDispatch | ApiDispatch | File Config | Programmatic Config | Status Closed Message | Connection Recovery | Authentication Token Handling | Channel Information | Login Reissue |
| ex100_MP_Streaming                    | Х         |                      | Х                          |  |  |                                 |               |                    |                             | Х                          |              | Х           |             |                     |                       |                     |                               |                     |               |
| ex110_MBO_Streaming                   | х         |                      | Х                          |  |  |                                 |               |                    |                             | Х                          |              | Х           |             |                     |                       |                     |                               |                     |               |
| ex170_MP_ChannelInfo                  | Х         |                      |                            | Х  |  |                                 |               |                    |                             | Х                          |              | Х           |             |                     |                       |                     |                               | Х                   |               |
| ex200_MP_Streaming                    | Х         |                      |                            | Х  |  |                                 |               |                    |                             | Х                          |              | Х           | Х           |                     |                       |                     |                               |                     |               |
| ex201_MP_TunnelingConnection          | Х         | Х                    |                            | Х  |  |                                 |               |                    |                             | Х                          |              | Х           | Х           |                     |                       |                     |                               |                     |               |
| ex210_MBO_Streaming                   | х         |                      |                            | Х  |  |                                 |               |                    |                             | Х                          |              | Х           | Х           |                     |                       |                     |                               |                     |               |
| ex250_MP_Perf                         | Х         |                      |                            | Х  |  |                                 |               |                    |                             | Х                          |              | Х           | Х           |                     |                       |                     |                               |                     |               |
| ex251_MP_Perf_KeyByServiceId          | Х         |                      |                            | Х  |  |                                 |               |                    |                             | Х                          |              | Х           | Х           |                     |                       |                     |                               |                     |               |
| ex300_MP_Streaming                    | Х         |                      |                            |  |  | Х                               |               |                    | Х                           |                            |              | Х           | Х           |                     |                       |                     |                               |                     |               |
| ex310_MBO_Streaming                   | х         |                      |                            |  |  | Х                               |               |                    | Х                           |                            |              | Х           | Х           |                     |                       |                     |                               |                     |               |
| ex320_MP_Streaming_StatusClosed       | Х         |                      |                            |  |  | Х                               |               |                    | Х                           |                            |              | Х           | Х           |                     | Х                     |                     |                               |                     |               |
| ex340_Login_Streaming                 | Х         |                      |                            | Х  |  |                                 | Х             |                    |                             | Х                          | Х            |             | Х           |                     |                       |                     |                               |                     |               |
| ex350_Dictionary_Streaming            | Х         |                      |                            | Х  |  |                                 |               | Х                  |                             | Х                          |              | Х           | Х           |                     |                       |                     |                               |                     |               |
| ex360_MP_ConnectionRecovery           | Х         |                      |                            | Х  |  |                                 | Х             |                    |                             | Х                          | Х            |             | Х           |                     |                       | Х                   |                               |                     |               |
| ex421_MP_ProgrammaticCfg              | Х         |                      |                            |  | Х  |                                 |               |                    |                             | Х                          |              | Х           |             | Х                   |                       |                     |                               |                     |               |
| ex430_MP_Authentication               | Х         |                      |                            | Х  |  |                                 |               |                    |                             | X                          |              | Х           | Х           |                     |                       |                     | Х                             |                     | Х             |

|                |               |                                       | St                   | ructı                                 | ıre                                  |                    |                     |                    |
|----------------|---------------|---------------------------------------|----------------------|---------------------------------------|--------------------------------------|--------------------|---------------------|--------------------|
| Msg.ToString() | Vlap::add<>() | ieldList::add<>()                     | ElementList::add<>() | RefreshMsg::set<>()                   | UpdateMsg::set<>()                   | StatusMsg::set<>() | RefreshMsg::get<>() | StatusMsg::get<>() |
| _              | _             | Х                                     |                      | Х                                     | х                                    | 0,                 |                     | 0,                 |
|                | Х             | х                                     |                      | х                                     | Х                                    |                    |                     |                    |
|                |               | х                                     |                      | х                                     | Х                                    |                    |                     |                    |
|                |               | Х                                     |                      | Х                                     | Х                                    |                    |                     |                    |
|                |               | Х                                     |                      | Х                                     | Х                                    |                    |                     |                    |
|                | х             | ١                                     |                      |                                       |                                      |                    |                     |                    |
|                | ,,            | <                                     |                      | Х                                     | Х                                    |                    |                     |                    |
|                |               | X                                     |                      | X                                     | X                                    |                    |                     |                    |
|                |               | X                                     |                      | X<br>X                                | X<br>X                               |                    |                     |                    |
|                |               | X<br>X<br>X                           | х                    | X<br>X<br>X                           | X<br>X<br>X                          |                    |                     |                    |
|                |               | X<br>X<br>X                           | X                    | X<br>X<br>X<br>X                      | X<br>X<br>X<br>X                     |                    |                     |                    |
|                | x<br>x        | X<br>X<br>X<br>X                      | X<br>X               | X<br>X<br>X<br>X<br>X                 | X<br>X<br>X<br>X<br>X                | x                  |                     |                    |
| x              |               | x x x x x x x x x x x x x x x x x x x | X<br>X<br>X          | X<br>X<br>X<br>X<br>X                 | X<br>X<br>X<br>X<br>X<br>X           | x                  |                     |                    |
|                |               |                                       | X<br>X<br>X          | x<br>x<br>x<br>x<br>x<br>x<br>x       | x<br>x<br>x<br>x<br>x<br>x<br>x      | x                  | x                   | x                  |
| x              |               | Х                                     | X<br>X<br>X          | X X X X X X X X X X X X X X X X X X X | X                                    | x                  | x                   | X                  |
|                |               |                                       | x<br>x<br>x          | x<br>x<br>x<br>x<br>x<br>x<br>x<br>x  | x<br>x<br>x<br>x<br>x<br>x<br>x<br>x | x                  | x                   | x                  |

## List of Interactive Provider Examples

| Interactive Provider Example Name | Feature   |                      |                            |  |  |                                 |                    |                             |                            |                              |                             |              |             |             |           |                              |                             |         |                     |                        |
|-----------------------------------|-----------|----------------------|----------------------------|--|--|---------------------------------|--------------------|-----------------------------|----------------------------|------------------------------|-----------------------------|--------------|-------------|-------------|-----------|------------------------------|-----------------------------|---------|---------------------|------------------------|
|                                   | Streaming | Tunneling Connection | Hardcoded Source Directory | Configurable Source Directory from EmaConfig.xml | Configurable Source Directory Programmatically | Submit Source Directory Message | Dictionary Request | Directory Admin UserControl | Directory Admin ApiControl | Dictionary Admin UserControl | Dictionary Admin ApiControl | UserDispatch | ApiDispatch | File Config | HandleRTT | Connected Client Information | Login Domain Representation | Posting | Programmatic Config | Closing client channel |
| ex100_MP_Streaming                | X         | _                    | X                          | O  | O  | S                               | ٥                  | ٥                           | X                          | ٥                            | X                           |              | X           | ш           | I         | 0                            | 7                           | ď       | Ь                   | O                      |
| ex102_MP_Snapshot                 | X         |                      | X                          |  |  |                                 |                    |                             | X                          |                              | х                           |              | X           |             |           |                              |                             |         |                     |                        |
| ex130_MP_UserDispatch             | X         |                      | X                          |  |  |                                 |                    |                             | X                          |                              | X                           | х            |             |             |           |                              |                             |         |                     |                        |
| ex140_MBO_Streaming               | X         |                      | X                          |  |  |                                 |                    |                             | X                          |                              | X                           | ^            | Х           |             |           |                              |                             |         |                     |                        |
| ex150_MBO_Snapshot                | X         |                      | х                          |  |  |                                 |                    |                             | Х                          |                              | х                           |              | Х           |             |           |                              |                             |         |                     | $\vdash$               |
| ex160_Login_AcceptDeny            | Ĥ         |                      | Х                          |  |  |                                 |                    |                             | х                          |                              | х                           |              | х           |             |           |                              |                             |         |                     | $\vdash$               |
| ex161_Login_AcceptDeny_DomainRep  |           |                      | X                          |  |  |                                 |                    |                             | Х                          |                              | Х                           |              | Х           |             |           |                              | х                           |         |                     |                        |
| ex170 MP ConnectedClientInfo      | Х         |                      |                            | Х  |  |                                 |                    |                             | х                          |                              | Х                           | Х            |             |             |           | х                            |                             |         |                     |                        |
| ex180_MP_Websocket                | Х         |                      |                            | х  |  |                                 |                    |                             | Х                          |                              | Х                           | Х            |             | Х           |           |                              |                             |         |                     | х                      |
| ex200_MP_Streaming                | х         |                      |                            | х  |  |                                 |                    |                             | х                          |                              | Х                           | Х            |             | Х           |           |                              |                             |         |                     |                        |
| ex201_MP_Encrypted                | х         | Х                    |                            | х  |  |                                 |                    |                             | х                          |                              | х                           |              | Х           | Х           |           |                              |                             |         |                     |                        |
| ex210_MBP_Streaming               | Х         |                      |                            | Х  |  |                                 |                    |                             | Х                          |                              | Х                           | Х            |             | Х           |           |                              |                             |         |                     |                        |
| ex240_SourceDirectory_Fanout      | х         |                      |                            | Х  |  | Х                               |                    |                             | Х                          |                              | Х                           |              | Х           | Х           |           |                              |                             |         |                     |                        |
| ex250_GroupStatus_Fanout          | Х         |                      |                            | Х  |  | Х                               |                    |                             | Х                          |                              | Х                           |              | Х           | Х           |           |                              |                             |         |                     |                        |
| ex260_Custom_NestedMsg            | Х         |                      |                            | Х  |  |                                 |                    |                             | Х                          |                              | Х                           | Х            |             | Х           |           |                              |                             |         |                     |                        |
| ex280_MP_Perf                     | Х         |                      |                            | Х  |  |                                 |                    |                             | Х                          |                              | Х                           | Х            |             | Х           |           |                              |                             |         |                     |                        |
| ex300_MP_Close                    | Х         |                      |                            | Х  |  |                                 |                    |                             | Х                          |                              | Х                           |              | Х           | Х           |           |                              |                             |         | Х                   |                        |
| ex301_MP_PriorityChange           | Х         |                      |                            | Х  |  |                                 |                    |                             | Х                          |                              | Х                           | Х            |             | Х           |           |                              |                             |         |                     |                        |
| ex320_Custom_GenericMsg           | Х         |                      |                            | Х  |  |                                 |                    |                             | Х                          |                              | Х                           | Х            |             | Х           |           |                              |                             |         |                     |                        |
| ex331_Directory_UserControl       | Х         |                      |                            |  |  | Х                               |                    | Х                           |                            |                              | Х                           |              | Х           | Х           |           |                              |                             |         |                     |                        |
| ex332_Dictionary_UserControl      | Х         |                      |                            | Х  |  |                                 |                    |                             | Х                          | Х                            |                             |              | Х           | Х           |           |                              |                             |         |                     |                        |
| ex340_MP_Posting                  | Х         |                      |                            | Х  |  |                                 |                    |                             |                            |                              |                             |              | Х           | Х           |           |                              |                             | Х       |                     |                        |
| ex350_Dictionary_Streaming        | X         |                      |                            | Х  |  |                                 | Х                  |                             | Х                          |                              | Х                           |              | Х           | Х           |           |                              |                             |         |                     | ш                      |
| ex380_MP_ConnectionLost           | X         |                      |                            | Х  |  |                                 |                    |                             | Х                          |                              | Х                           |              | Х           | Χ           |           |                              |                             |         |                     | ш                      |
| ex421_MP_ProgrammaticCfg          | X         |                      |                            |  | Х  |                                 |                    |                             | Х                          |                              | Х                           | Χ            |             |             |           |                              |                             |         | Χ                   | ш                      |
| ex460_MP_RTT                      | X         |                      |                            | Х  |  |                                 |                    |                             |                            |                              |                             | X            |             | X           | X         |                              |                             |         |                     |                        |

|              |   |                      |                                       | Stru  | ctur                | е                |                |                     |                    |
|--------------|---|----------------------|---------------------------------------|---|---------------------|------------------|----------------|---------------------|--------------------|
| Map::add<>() | X X X FieldList::add<>()  | ElementList::add<>() | X X X X X X X X X X X X X X X X X X X | × UpdateMsg::set<>()                                | RefreshMsg::get<>() | PostMsg::get<>() | AckMsg:set<>() | GenericMsg::get<>() | UpdateMsg::get<>() |
|              | Х   | -                    | Х                                     | X   |                     |                  | _              |                     | _                  |
|              | Х   |                      | Х                                     |   |                     |                  |                |                     |                    |
|              | Х   |                      | Х                                     | X   |                     |                  |                |                     |                    |
| X            | Х   |                      | Х                                     | Х   |                     |                  |                |                     |                    |
| Х            | Х   |                      | Х                                     |   |                     |                  |                |                     |                    |
|              |   |                      | Х                                     |   |                     |                  |                |                     |                    |
|              |   |                      | Х                                     |   |                     |                  |                |                     |                    |
|              | X<br>X  |                      | Х                                     | Х   |                     |                  |                |                     |                    |
|              | Х   |                      | Х                                     | Х   |                     |                  |                |                     |                    |
|              | Х   |                      | Х                                     | Х   |                     |                  |                |                     |                    |
|              |   |                      | Х                                     | Х   |                     |                  |                |                     |                    |
| X<br>X       | X   | ٠,                   | X                                     | X   |                     |                  |                |                     |                    |
| X            | X   | X                    | X                                     | X   |                     |                  |                |                     |                    |
|              | \ <u>`</u>  | ^                    | X<br>V                                | \ <u>\</u>  |                     |                  |                |                     |                    |
| $\vdash$     | ÷   |                      | л<br>У                                | X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X |                     |                  |                |                     |                    |
| $\vdash$     | x   |                      | X                                     | x   |                     |                  |                |                     |                    |
|              | x   |                      | X                                     | x   |                     |                  |                |                     |                    |
|              | X   | х                    | Х                                     | X   |                     |                  |                |                     |                    |
| х            | х   | X                    | Х                                     | х   |                     |                  |                |                     |                    |
| X            | х   |                      | Х                                     | х   |                     |                  |                |                     |                    |
|              | X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X<br>X | Х                    | Х                                     |   |                     | Х                | Х              |                     |                    |
| Х            | Х   |                      | Х                                     | Х   | Х                   |                  |                |                     | Х                  |
|              | Х   |                      | Х                                     | Х   |                     |                  |                |                     |                    |
|              | Х   |                      | Х                                     | X<br>X<br>X   |                     |                  |                |                     |                    |
|              | X   | X                    | X                                     | Х   |                     |                  |                | Х                   |                    |