# Reference - Broker ActiveX Control

This chapter covers the following topics:

- Methods of Broker ActiveX Control

- Properties of Broker ActiveX Control

## Methods of Broker ActiveX Control

This section describes the methods of Broker ActiveX Control.

### Broker ACI

The following methods are useful for writing applications using the native interface.

| Method | Description |
|---|---|
| `BSTR GetReceiveData()` | Return the received data inner string |
| `BSTR GetErrorText()` | Return the last received error message. |
| `BOOL SetSendDataLong(String, Long)` or `BOOL SetSendData (String, Short)` | Copy user's data buffer into the send buffer. |
| `BOOL InvokeBrokerFunction()` | Invoke the broker function call. Set the properties `Function` and `Option`. |

### Transaction Objects

| Method | Description |
|---|---|
| `Bool DefineTOMethods(String)` | Starts the TO editor. If you specify a valid TOR name, this TO is then loaded into the editor. If a valid TOR name is not specified, the currently loaded TO will be displayed or an empty editor will be started. |
| `Bool LoadTransObject(String)` | Loads and initializes a transaction object. You must specify a valid TOR file name; otherwise FALSE will be returned. |
| `Object CreateTransObject(String)` | Loads and initializes a transaction object. You must specify a valid TOR file name. An object reference will be returned, which can be used to call the methods defined in the TO. If loading fails, a null reference will be returned. |
| `Object CreateTransObjectSA(String)` | This method uses the safe array implementation for arrays instead of the collection implementation. If you experience problems accessing arrays with an automation controller, try using this method to instantiate a TOR object. |

# Properties of Broker ActiveX Control

Most properties of Broker ActiveX Control correspond to the Broker ACI fields. The properties must be set to the appropriate values before using any function.

If transaction object repository (TOR) files are used, it will not be necessary to set all the properties. See section *Transaction Objects in Broker ActiveX Control*. The properties can also be supplied by means of the property pages (see *Using the Property Pages* in section *Writing Applications - Broker ActiveX Control*).

| Property Name | Broker ACI Field | Format | Length | API Version | Description |
|---|---|---|---|---|---|
| AdapterError | not used | String | 8 | 2 | |
| AdCount | not used | Long | | 2 | |
| APIVersion | API-VERSION | Short | | 2 | Possible values: 1, 2, 3, 4, 5, 6, 7, 8, 9. The default is 2. This value can be changed dynamically by setting the property. If the current value of the `Function` or `Option` property requires a minimal API version, the value of `APIVersion` will be adjusted automatically. |

| Property Name | Broker ACI Field | Format | Length | API Version | Description |
|---|---|---|---|---|---|
| BrokerID | BROKER-ID | String | 32 | 1 | Target Broker ID. See *Using the Broker ID in Applications* and details on TCP/IP in *Transport Methods* for client and server \| publish and subscribe. |
| BrokerSecurity | KERNELSECURITY | String | 1 | 7 | |
| ClientUserid | CLIENT-UID | String | 32 | 2 | The partner's user ID. |
| CommitTime | COMMITTIME | String | 17 | 7 | Readonly property. Time when UOW was committed. Format: YYYYMMDDHHMMSSms ms = milliseconds in Possible Values field. |
| CompressLevel | COMPRESSLEVEL | String | 1 | 7 | Compression level. Possible values: N/Y/0-9.<br><br>The first character of the string will be used as the compression value. If you type YES, the character Y will be used and ES will be cut off. Example: Broker1.CompressLevel = "6".<br><br>See also *Data Compression* for client and server \| publish and subscribe. |
| ConvID | CONV-ID | String | 16 | 1 | Conversation ID, see *Managing Conversation Contexts*. |
| ConvStatus | CONV-STAT | Short | | 2 | Contains the status of the conversation when the RECEIVE function is complete. See *Managing Conversation Contexts*. Possible values:<br><br>1        NEW<br><br>2        OLD<br><br>3        NONE |
| EncryptionLevel | ENCRYPTION-LEVEL | Short | | 6 | Possible values: 0, 1, 2. See *Encryption* under *Writing Applications using EntireX Security*. |
| Environment | ENVIRONMENT | String | 32 | 1 | |

| Property Name | Broker ACI Field | Format | Length | API Version | Description |
|---|---|---|---|---|---|
| ErrorCode | ERROR-CODE | String | 8 | 1 | Broker error code, see *Error Handling* for client and server \| publish and subscribe. |
| ErrorMsg | not used | String | 40 | 1 | Contains the error message to the corresponding error code. |
| ForceLogon | FORCE-LOGON | Boolean | | 6 | Possible values: Y, N. |
| Function | FUNCTION<br>Possible values:<br><br>1    SEND<br><br>2    RECEIVE<br><br>4    UNDO<br><br>5    EOC<br><br>6    REGISTER<br><br>7    DEREGISTER<br><br>8    VERSION<br><br>9    LOGON<br><br>10    LOGOFF<br><br>13    SYNCPOINT<br><br>14    KERNELVERS<br><br>17    SEND_PUBLICATION<br><br>18    RECEIVE_PUBLICATION<br><br>19    SUBSCRIBE<br><br>20    UNSUBSCRIBE<br><br>21    CONTROL_PUBLICATION | Short | | 1 | The functions to be performed by Broker. |
| LocaleString | LOCALE-STRING | String | 40 | 4 | For sending locale strings to the broker (see *Using Internationalization* in *Writing Applications - Broker ActiveX Control*). |
| MessageId | not used | String | 32 | 2 | |
| MessageType | not used | String | 32 | 2 | |
| NewPassword | NEWPASSWORD | String | 32 | 2 | |

| Property Name | Broker ACI Field | Format | Length | API Version | Description |
|---|---|---|---|---|---|
| Option | OPTION<br><br>Possible values:<br>0     NULL<br>1     MSG<br>2     HOLD<br>3     IMMED<br>4     QUIESCE<br>5     EOC<br>6     CANCEL<br>7     LAST<br>8     NEXT<br>9     PREVIEW<br>10    COMMIT<br>11    BACKOUT<br>12    SYNC<br>13    ATTACH<br>14    DELETE<br>15    EOCCANCEL<br>16    QUERY<br>17    SETUSTATUS<br>18    ANY<br>19    no longer used<br>20    DURABLE<br>21    CHECKSERVICE | Short | | 1 | |
| Password | PASSWORD | String | 32 | 1 | |
| ReceiveBufferLength | RECEIVE-LENGTH | Long | | 3 | Length of the receive buffer. |
| ReceiveBufferSize | RECEIVE-LENGTH | Short | | 1 | This is an old property. Can be used instead of `ReceiveBufferLength` - for buffers with less than 32 KB only. |
| ReturnDataLength | RETURN-LENGTH | Long | | 3 | Length of returned data. |
| ReturnLength | RETURN-LENGTH | Short | | 1 | This is an old property. Can be used instead of `ReturnDataLength` - for buffers with less than 32 KB only. |

| Property Name | Broker ACI Field | Format | Length | API Version | Description |
|---|---|---|---|---|---|
| SecurityToken | SECURITY-TOKEN | String | 32 | 2 | This is handled automatically, but can be filled in by the user if required. |
| SendBufferSize | | Short | | 1 | No longer used. |
| ServerClass | SERVER-CLASS | String | 32 | 1 | These three Broker parameters form the target service. |
| ServerName | SERVER-NAME | String | 32 | 1 | |
| Service | SERVICE | String | 32 | 1 | |
| Store | STORE | Short | | 2 | Possible values:<br><br>0    NULL<br><br>1    OFF<br><br>2    BROKER |
| Token | TOKEN | String | 32 | 1 | |
| UOWID | UOWID | String | 16 | 3 | |
| UOWStatus | UOWSTATUS<br><br>Possible values:<br><br>0    NONE<br>1    RECEIVED<br>2    ACCEPTED<br>3    DELIVERED<br>4    BACKEDOUT<br>5    PROCESSED<br>6    CANCELLED<br>7    TIMEOUT<br>8    DISCARDED<br>9    FIRST<br>10    MIDDLE<br>11    LAST<br>12    ONLY | Short | | 3 | |
| UOWStatusPersist | UOW-STATUS-PERSIST | Short | | 3 | |
| UOWTime | UWTIME | String | 8 | 3 | |
| UserData | USER-DATA | String | 16 | 2 | This field is not converted by the Broker. If the field contains H'00', only the data up to the first H'00' will be sent. |
| UserID | USER-ID | String | 32 | 1 | User ID. |

| Property Name | Broker ACI Field | Format | Length | API Version | Description |
|---|---|---|---|---|---|
| UserStatus | USTATUS | String | 32 | 3 | |
| Wait | WAIT | String | 8 | 1 | Possible values: Yes No <n>S - waiting n Seconds (max 99999) <n>M - waiting n Minutes (Max 99999) <n>H - waiting n Hours (max 99999). See *Blocked and Non-blocked Broker Calls*. |
| Topic | | String | | 8 | Required for handling with publish and subscribe. |
| PublicationID | | String | 16 | 8 | Required for handling with publish and subscribe. |
| UOWStatusLife | | String | 8 | 8 | |