

## Legacy Host Logging vs New Converter Endpoint

### 1. Existing Service: Private Function Sending(...)

- Uses `hostAdaptor.SendAndReceive(sSendMsg, sRecvMsg)`.
- Captures timestamps:  
    `sSendTime = Now.ToString("MM/dd/yyyy HH:mm:ss.ffff")`  
    `sRecvTime = Now.ToString("MM/dd/yyyy HH:mm:ss.ffff")`
- Builds `sTraceLog` based on `HostMsgLogTrace` setting (`sendonly` / `receiveonly` / `sendandreceive`):
  - \* `sendonly` -> logs ONLY request (`sSendMsg`)
  - \* `receiveonly` -> logs ONLY response (`sRecvMsg`)
  - \* `sendandreceive` -> logs BOTH request and response
- Finally, if `sTraceLog.Length > 0` it calls:  
    `RaiseEvent LogError(msDBID, sTraceLog, "Trace to/from Host")`  
    This event handler ultimately writes the trace into the Encore SQL log table.

Conclusion: any call that goes through `Sending(...)` will persist the request/response pair to the Encore SQL logging table.

### 2. New Service: Private Sub `SendToConverterEndpoint(ByRef xml As String, ByRef response As String)`

- Reads `MessageConverterURL` from config.
- Reads `HostMsgLogTrace` into a local `StringBuilder` called "trace".
- Performs HTTP POST with `HttpClient` to the new converter endpoint.
- On success:
  - Sets "response" to `resp.Content.ReadAsStringAsync().Result`
  - Does NOT write any trace logs.
- On failure:
  - If trace is not `Constants.Trace.None`, it calls:  
    `RaiseEvent LogError("encore", ex.Message, ROUTINE)`  
    So only errors are logged, not the normal request/response XML.

Conclusion: calls going through `SendToConverterEndpoint(...)` are currently NOT logging the XML request/response pair.

### 3. How to Add Request/Response Logging to `SendToConverterEndpoint`

Goal: Make the new HTTP-based path behave like the legacy `Sending(...)` function, driven by the same `HostMsgLogTrace`.

High-level steps:

- 1) Capture timestamps around the HTTP call:  
    `sendTime = Now.ToString("MM/dd/yyyy HH:mm:ss.ffff")`  
    `recvTime = Now.ToString("MM/dd/yyyy HH:mm:ss.ffff")`
- 2) After a successful response, build a `traceLog` string similar to `Sending(...)`, based on `HostMsgLogTrace` (`sendonly`, `receiveonly`, `sendandreceive`). For example:
  - `sendonly`:  
    `"Send to Converter; len={xml.Length} {sendTime}\r\n{xml}"`
  - `receiveonly`:  
    `"Receive from Converter; len={response.Length} {recvTime}\r\n{response}"`

- sendandreceive:

```
"Send to Converter; len={xml.Length} {sendTime}\r\n{xml}\r\n" +  
"Receive from Converter; len={response.Length} {recvTime}\r\n{response}"
```

3) If traceLog is not empty and HostMsgLogTrace is not "none", raise the same logging event:

```
RaiseEvent LogError("encore", traceLog, "Trace to/from Converter")
```

(You can also use msDBID instead of "encore" if you want it to behave exactly like the original.)

#### 4. Sketch of Updated SendToConverterEndpoint (VB.NET)

```
Private Sub SendToConverterEndpoint(ByRef xml As String, ByRef response As String)
```

```
    Const ROUTINE As String = "HostMsg.SendToSTEndpoint"
```

```
    Const LogTraceKey As String = "HostMsgLogTrace"
```

```
    Dim trace As New StringBuilder()
```

```
    Dim endpointUrl As String = ConfigurationManager.AppSettings.Get("MessageConverterURL")
```

```
    Dim sendTime As String = Now.ToString("MM/dd/yyyy HH:mm:ss.ffff")
```

```
    Dim recvTime As String = Nothing
```

```
    Try
```

```
        trace.Append(ConfigurationManager.AppSettings.Get(LogTraceKey))
```

```
        If trace.Length = 0 Then
```

```
            trace.Append(Constants.Trace.None)
```

```
        End If
```

```
    ServicePointManager.SecurityProtocol = SecurityProtocolType.Tls12
```

```
    Using client As New HttpClient()
```

```
        client.Timeout = TimeSpan.FromSeconds(30)
```

```
        Dim content As New StringContent(xml, Encoding.UTF8, "application/xml")
```

```
        Dim resp As HttpResponseMessage = client.PostAsync(endpointUrl, content).Result
```

```
        response = Task.Run(Function() resp.Content.ReadAsStringAsync()).Result
```

```
        recvTime = Now.ToString("MM/dd/yyyy HH:mm:ss.ffff")
```

```
        If Not resp.IsSuccessStatusCode Then
```

```
            Throw New HttpRequestException(String.Format("{0} Error {1}: {2}", ROUTINE, CInt(resp.StatusCode), resp.ReasonPhrase))
```

```
        End If
```

```
    End Using
```

```
    ' --- request/response logging similar to Sending ---
```

```
    Dim traceSetting As String = trace.ToString().ToLowerInvariant()
```

```
    Dim traceLog As String = String.Empty
```

```
    If traceSetting = "sendonly" Then
```

```
        traceLog = String.Format("Send to Converter; len={1}{0}{2}{3}", sendTime, xml.Length & " ", vbCrLf, xml)
```

```
    ElseIf traceSetting = "receiveonly" Then
```

```
        traceLog = String.Format("Receive from Converter; len={1}{0}{2}{3}", recvTime, response.Length & " ", vbCrLf, response)
```

```
    ElseIf traceSetting = "sendandreceive" Then
```

```
        traceLog = String.Format("Send to Converter; len={1}{0}{2}{3}", sendTime, xml.Length & " ", vbCrLf, xml) & _  
            vbCrLf & _
```

```

        String.Format("Receive from Converter; len={1}{0}{2}{3}", recvTime, response.Length & " ", vbCrLf, resp
End If

If traceLog.Length > 0 AndAlso Not traceSetting.Equals(Constants.Trace.None, StringComparison.Ordinal) Then
    RaiseEvent LogError("encore", traceLog, "Trace to/from Converter")
End If

Catch ex As Exception
    If trace.Length > 0 AndAlso trace.ToString().Equals(Constants.Trace.None) = False Then
        RaiseEvent LogError("encore", ex.Message, ROUTINE)
    End If
End Try
End Sub

```

## 5. Quick Summary

- Old path Sending(...) → logs request/response to Encore SQL via LogError event when HostMsgLogTrace is configured
- New path SendToConverterEndpoint(...) → currently logs only errors, not normal traffic.
- To keep observability and debugging parity, add a traceLog section after the successful HTTP call and raise the same event