

Server-Sent Events

HTML5 Server-Sent Events allow us to update the web page from a web server.

Examples: Facebook updates, stock price updates, news feeds, cricket/ election results, etc.

```
<!DOCTYPE html>
<html>
<body>
  <h1>Getting Server Updates</h1>
  <div id="result"></div>
  <script>
    if (typeof (EventSource) != "undefined") {
      var source = new EventSource("demo.asp");
      source.onmessage = function (event) {
        document.getElementById("result").innerHTML += event.data + "<br>";
      };
    }
    else {
      document.getElementById("result").innerHTML = "Sorry, your browser does not support server-sent
events...";
    }
  </script>
</body>
</html>
```

Code Explained:

1. Create a new EventSource object, and specify the URL of the page sending the updates (in this example "demo.asp")
2. Each time an update is received, the onmessage event occurs
3. When an onmessage event occurs, put the received data into the element with id="result"

Demo.asp

```
<%
Response.ContentType = "text/event-stream"
Response.Expires = -1
Response.Write("retry:1000" & vbCrLf)
Response.Write("data: " & now() & vbCrLf & vbCrLf)
```

```
Response.Flush()
```

```
%>
```

Code explained:

1. Set the "Content-Type" header to "text/event-stream"
2. Specify that the page should not cache
3. Output the data to send (**Always** start with "data: ")
4. Flush the output data back to the web page

Example 2: Using JSON and Custom messages:

CustomEventDemo.html

```
<!DOCTYPE html>
<html>
<body>
  <h1>Getting server updates</h1>
  <div id="result"></div>
  <script>
    var source = new EventSource("CustomEventDemo.asp");
    source.addEventListener('message', function (e) {
      var data = JSON.parse(e.data);
      document.getElementById("result").innerHTML += data.msg + "<br>";
    }, false);

    source.addEventListener('userlogon', function (e) {
      var data = JSON.parse(e.data);
      document.getElementById("result").innerHTML += 'User login: ' + data.username + "<br>";
    }, false);

    source.addEventListener('update', function (e) {
      var data = JSON.parse(e.data);
      document.getElementById("result").innerHTML += data.username + ' is now ' + data.emotion + "<br>";
    }, false);
  </script>
</body>
</html>
```

CustomEventDemo.asp:

<%

```
Response.ContentType = "text/event-stream"
```

```
Response.Expires = -1
```

```
Response.Write("retry:5000" & vbCrLf)
```

%>

```
data: {"msg": "First message"}
```

```
event: userlogin
```

```
data: {"username": "Sandeep"}
```

```
event: update
```

```
data: {"username": "Sandeep", "emotion": "happy"}
```

Note: New lines are required after every event and its data...