The EME Logger Extension

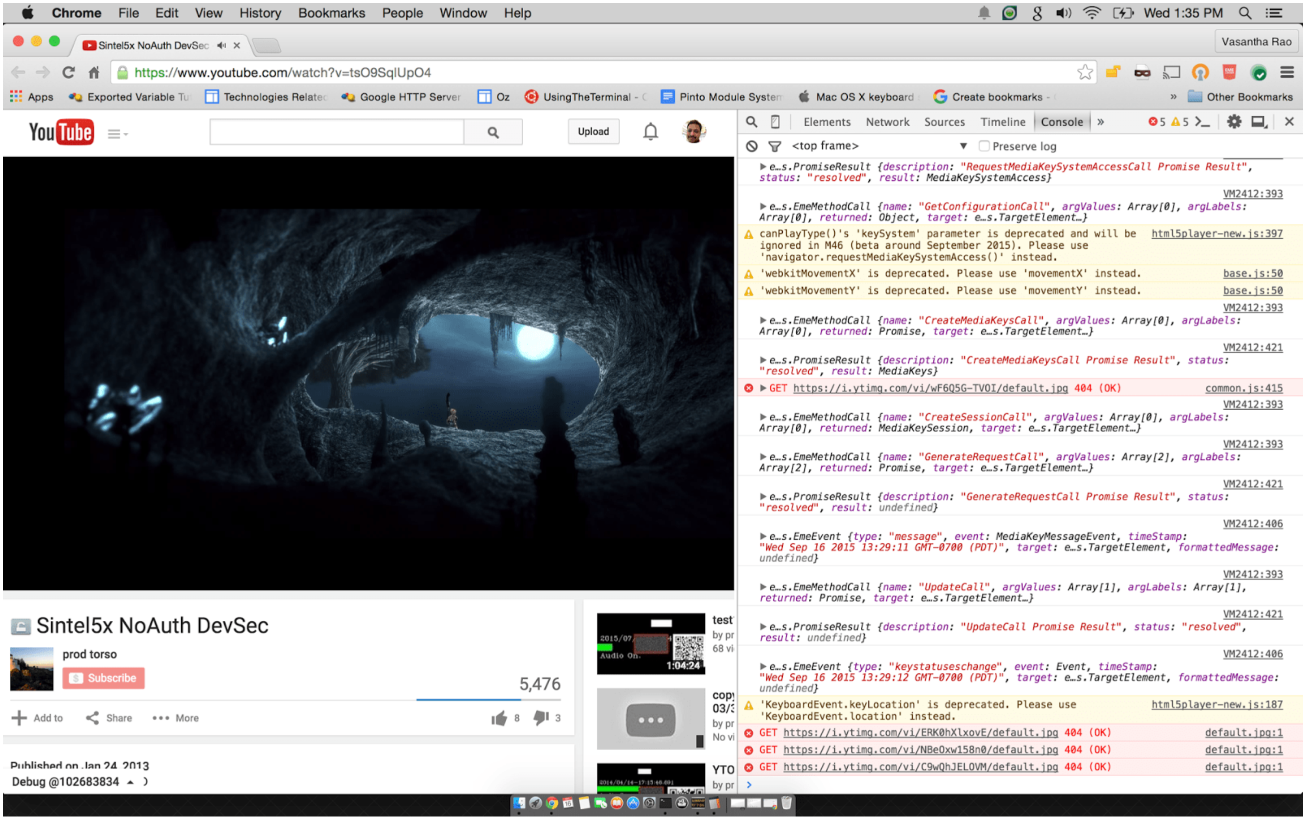
By Sam Dutton

Sam is a Developer Advocate

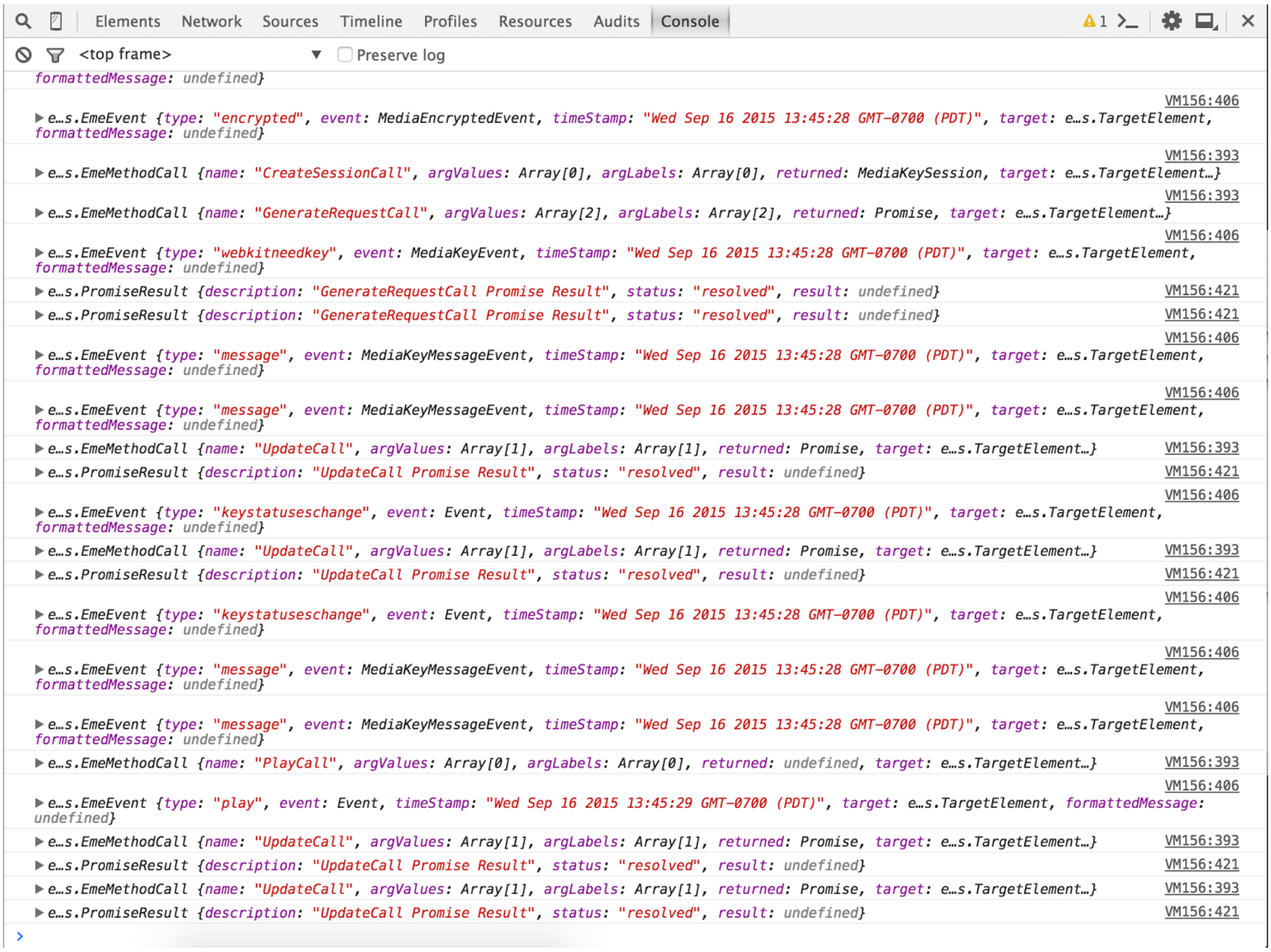
Do you use Encrypted Media Extensions?

If so, you may be interested in EME Logger: a Chrome extension from Google that logs EME events and calls to the DevTools console along with debugging information.

You can install EME Logger extension from the Chrome Web Store..



```
▶ e…s.PromiseResult {description: "RequestMediaKeySystemAccessCall Promise Result",
status: "resolved", result: MediaKeySystemAccess}
                                                                          VM2412:393
▶ e…s.EmeMethodCall {name: "GetConfigurationCall", argValues: Array[0], argLabels:
Array[0], returned: Object, target: e…s.TargetElement…}
⚠ canPlayType()'s 'keySystem' parameter is deprecated and will be  html5player-new.js:397
ignored in M46 (beta around September 2015). Please use
'navigator.requestMediaKeySystemAccess()' instead.
⚠ 'webkitMovementX' is deprecated. Please use 'movementX' instead.          base.js:50
⚠ 'webkitMovementY' is deprecated. Please use 'movementY' instead.          base.js:50
                                                                          VM2412:393
▶ e…s.EmeMethodCall {name: "CreateMediaKeysCall", argValues: Array[0], argLabels:
Array[0], returned: Promise, target: e…s.TargetElement…}
                                                                          VM2412:421
▶ e…s.PromiseResult {description: "CreateMediaKeysCall Promise Result", status:
"resolved", result: MediaKeys}
⊗ ▶ GET https://i.ytimg.com/vi/wF6Q5G-TVOI/default.jpg 404 (OK)         common.js:415
                                                                          VM2412:393
▶ e…s.EmeMethodCall {name: "CreateSessionCall", argValues: Array[0], argLabels:
Array[0], returned: MediaKeySession, target: e…s.TargetElement…}
                                                                          VM2412:393
▶ e…s.EmeMethodCall {name: "GenerateRequestCall", argValues: Array[2], argLabels:
Array[2], returned: Promise, target: e…s.TargetElement…}
                                                                          VM2412:421
▶ e…s.PromiseResult {description: "GenerateRequestCall Promise Result", status:
"resolved", result: undefined}
                                                                          VM2412:406
▶ e…s.EmeEvent {type: "message", event: MediaKeyMessageEvent, timeStamp:
"Wed Sep 16 2015 13:29:11 GMT-0700 (PDT)", target: e…s.TargetElement, formattedMessage:
undefined}
                                                                          VM2412:393
▶ e…s.EmeMethodCall {name: "UpdateCall", argValues: Array[1], argLabels: Array[1],
returned: Promise, target: e…s.TargetElement…}
                                                                          VM2412:421
▶ e…s.PromiseResult {description: "UpdateCall Promise Result", status: "resolved",
result: undefined}
                                                                          VM2412:406
▶ e…s.EmeEvent {type: "keystatuseschange", event: Event, timeStamp:
"Wed Sep 16 2015 13:29:12 GMT-0700 (PDT)", target: e…s.TargetElement, formattedMessage:
undefined}
⚠ 'KeyboardEvent.keyLocation' is deprecated. Please use          html5player-new.js:187
'KeyboardEvent.location' instead.
⊗ GET https://i.ytimg.com/vi/ERK0hXlxovE/default.jpg 404 (OK)             default.jpg:1
⊗ GET https://i.ytimg.com/vi/NBeOxw158n0/default.jpg 404 (OK)             default.jpg:1
⊗ GET https://i.ytimg.com/vi/C9wQhJELOVM/default.jpg 404 (OK)             default.jpg:1
>
```



```
  formattedMessage: undefined}
                                                                                                                    VM156:406
▶ e…s.EmeEvent {type: "encrypted", event: MediaEncryptedEvent, timeStamp: "Wed Sep 16 2015 13:45:28 GMT-0700 (PDT)", target: e…s.TargetElement,
  formattedMessage: undefined}
                                                                                                                    VM156:393
▶ e…s.EmeMethodCall {name: "CreateSessionCall", argValues: Array[0], argLabels: Array[0], returned: MediaKeySession, target: e…s.TargetElement…}
                                                                                                                    VM156:393
▶ e…s.EmeMethodCall {name: "GenerateRequestCall", argValues: Array[2], argLabels: Array[2], returned: Promise, target: e…s.TargetElement…}
                                                                                                                    VM156:406
▶ e…s.EmeEvent {type: "webkitneedkey", event: MediaKeyEvent, timeStamp: "Wed Sep 16 2015 13:45:28 GMT-0700 (PDT)", target: e…s.TargetElement,
  formattedMessage: undefined}
▶ e…s.PromiseResult {description: "GenerateRequestCall Promise Result", status: "resolved", result: undefined}              VM156:421
▶ e…s.PromiseResult {description: "GenerateRequestCall Promise Result", status: "resolved", result: undefined}              VM156:421
                                                                                                                    VM156:406
▶ e…s.EmeEvent {type: "message", event: MediaKeyMessageEvent, timeStamp: "Wed Sep 16 2015 13:45:28 GMT-0700 (PDT)", target: e…s.TargetElement,
  formattedMessage: undefined}
                                                                                                                    VM156:406
▶ e…s.EmeEvent {type: "message", event: MediaKeyMessageEvent, timeStamp: "Wed Sep 16 2015 13:45:28 GMT-0700 (PDT)", target: e…s.TargetElement,
  formattedMessage: undefined}
▶ e…s.EmeMethodCall {name: "UpdateCall", argValues: Array[1], argLabels: Array[1], returned: Promise, target: e…s.TargetElement…}   VM156:393
▶ e…s.PromiseResult {description: "UpdateCall Promise Result", status: "resolved", result: undefined}                      VM156:421
                                                                                                                    VM156:406
▶ e…s.EmeEvent {type: "keystatuseschange", event: Event, timeStamp: "Wed Sep 16 2015 13:45:28 GMT-0700 (PDT)", target: e…s.TargetElement,
  formattedMessage: undefined}
▶ e…s.EmeMethodCall {name: "UpdateCall", argValues: Array[1], argLabels: Array[1], returned: Promise, target: e…s.TargetElement…}   VM156:393
▶ e…s.PromiseResult {description: "UpdateCall Promise Result", status: "resolved", result: undefined}                      VM156:421
                                                                                                                    VM156:406
▶ e…s.EmeEvent {type: "keystatuseschange", event: Event, timeStamp: "Wed Sep 16 2015 13:45:28 GMT-0700 (PDT)", target: e…s.TargetElement,
  formattedMessage: undefined}
                                                                                                                    VM156:406
▶ e…s.EmeEvent {type: "message", event: MediaKeyMessageEvent, timeStamp: "Wed Sep 16 2015 13:45:28 GMT-0700 (PDT)", target: e…s.TargetElement,
  formattedMessage: undefined}
                                                                                                                    VM156:406
▶ e…s.EmeEvent {type: "message", event: MediaKeyMessageEvent, timeStamp: "Wed Sep 16 2015 13:45:28 GMT-0700 (PDT)", target: e…s.TargetElement,
  formattedMessage: undefined}
▶ e…s.EmeMethodCall {name: "PlayCall", argValues: Array[0], argLabels: Array[0], returned: undefined, target: e…s.TargetElement…}   VM156:393
                                                                                                                    VM156:406
▶ e…s.EmeEvent {type: "play", event: Event, timeStamp: "Wed Sep 16 2015 13:45:29 GMT-0700 (PDT)", target: e…s.TargetElement, formattedMessage:
  undefined}
▶ e…s.EmeMethodCall {name: "UpdateCall", argValues: Array[1], argLabels: Array[1], returned: Promise, target: e…s.TargetElement…}   VM156:393
▶ e…s.PromiseResult {description: "UpdateCall Promise Result", status: "resolved", result: undefined}                      VM156:421
▶ e…s.EmeMethodCall {name: "UpdateCall", argValues: Array[1], argLabels: Array[1], returned: Promise, target: e…s.TargetElement…}   VM156:393
▶ e…s.PromiseResult {description: "UpdateCall Promise Result", status: "resolved", result: undefined}                      VM156:421
>
```

The code for EME Logger is available at github.com/google/eme_logger. Patches, bug reports and feature requests welcome.

More information about EME is available from the HTML5 Rocks article EME WTF ↗?

As an alternative to 'roll your own' EME, we recommend Shaka Player: an easy-to-use JavaScript library developed by Google that enables adaptive delivery of protected (and unprotected) media. Shaka Player implements Dynamic Adaptive Streaming over HTTP with Media Source Extensions to deliver the best possible video performance at any bandwidth. Shaka also supports multilingual content for audio tracks and subtitles. Find out more about Shaka Player at g.co/shakainfo.

Last updated July 2, 2018.