


## Moodle and Caliper

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## Agenda

- Caliper module for Moodle
  - installation
  - code review
- Caliper Profile Service for LTI
  - installation
  - usage
- Extending Caliper events in Moodle
  - forum event example

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## Caliper Module

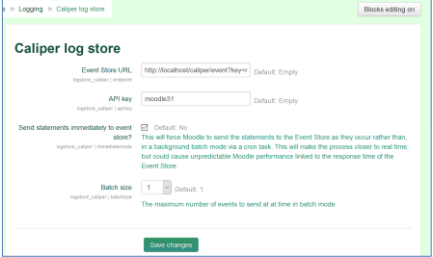
- Logging store with Caliper PHP Sensor API
- Settings:
  - endpoint
  - API key
  - send mode/batch size
- Three step process:
  - log expander
  - translator
  - event emitter

[https://github.com/moodlerooms/moodle-logstore\\_caliper](https://github.com/moodlerooms/moodle-logstore_caliper)


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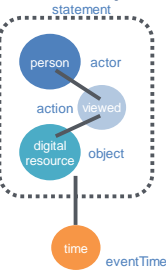
## Caliper Module: Settings Page



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## Caliper "free-form" event




```

{
  "sensor": "https://example.edu/sensor/001",
  "sendTime": "2015-09-15T11:05:01.000Z",
  "data": {
    "@context": "http://purl.imsglobal.org/ctx/caliper/v1/Context",
    "@type": "http://purl.imsglobal.org/caliper/v1/Event",
    "actor": {
      "@id": "https://example.edu/user/554433",
      "@type": "http://purl.imsglobal.org/caliper/v1/Person"
    },
    "action": "http://purl.imsglobal.org/vocab/caliper/v1/action#Viewed",
    "object": {
      "@id": "https://example.com/viewer/book/34843#pubcfi/4/3",
      "@type": "http://www.idpf.org/epub/vocab/structure/#volume"
    },
    "eventTime": "2015-09-15T10:15:00.000Z"
  }
}

```

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## Caliper Event Elements in Moodle

- Elements:
  - actor
  - action
  - object
  - eventTime
  - edApp
  - group
  - membership
  - federatedSession

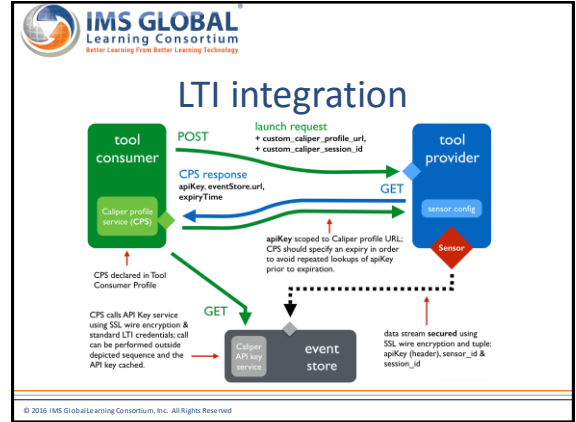
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## Caliper Events/Actions in Moodle

- Session:
  - logged in, logged out
- Viewed:
  - course view, module view
- Assignable:
  - attempt started, attempt completed, assignment submitted
- Outcome:
  - assignment graded

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## Caliper Profile Service for LTI

- Capabilities:
  - Caliper.profile.url
  - Caliper.sessionId
- Profile:
  - event store endpoint
  - API key (possibly via a separate service)
  - expires (optional)

[https://github.com/spvickers/moodle-ltiservice\\_caliperprofile](https://github.com/spvickers/moodle-ltiservice_caliperprofile)

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## Caliper Profile Service: Plugins Overview

External tool / LTI services			
Caliper Profile LTI Service ltiservice_caliperprofile	2016092200	Uninstall	Additional
Membership LTI Service ltiservice_memberships	2016091800		
Tool Consumer Profile LTI Service ltiservice_profile	2016052300		Required by: ltiservice_toolproxy, ltiservice_toolsettings
Tool Proxy Service ltiservice_toolproxy	2016052300		Required by: ltiservice_toolsettings
Tool Settings Service ltiservice_toolsettings	2016052300		

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## Extending Caliper Events

- Example: view discussion topic
  - get discussion event object
  - extract ID and name of topic
  - create Caliper event:
    - entity type
    - event type
    - subclass Event

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