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# Image Capture Specification, 4<sup>th</sup> Version

May 2013



# **Current Features**

- Three main methods
  - takePhoto() For photographs in the form of blob object
  - getFrame() for RGBA data in the form of an ImageData object
  - setOptions() for configuring capture device

frameGrabber() method for repeated frame capture was eliminated based on feedback from group

- Single error event handler onerror
- Settings changes
  - Made White Balance a numerical setting instead of an enum



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### Changes since last version

- Two main methods remain, but one has been removed
  - takePhoto() For photographs in the form of blob object
  - getFrame() for RGBA data in the form of an ImageData object
  - frameGrabber() method for repeated frame capture was eliminated based on feedback from group
- Single error event handler onerror
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## Existing issues specific to ImageCapture

- Media Capture and Streams spec still allows for two source types for VideoStreamTracks (video and photo-camera)
  - Would prefer that all types of VideoStreamTracks be photo-capable
    - Sources that do not support photo mode can result in error event being fired when takePhoto() is invoked
    - Avoids need for type-checking on source when creating ImageCapture object
- Zoom constraint does not currently exist for MediaStreamTrack
  - Will have to provide corresponding setting for ImageCapture in this case
  - Lack of VideoStreamTrack zoom constraint means that any corresponding video preview will not have a zoom effect displayed, or the zoom created by CSS techniques won't match ImageCapture zoom setting



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## **Broader Issues**

- Use of DOM Futures
  - See mailing list thread from April, starting with <u>http://lists.w3.org/Archives/Public/public-media-capture/2013Apr/0008.html</u>
  - ImageCapture is event driven, like Recording API
    - Current specification can be readily changed to using futures
    - Current spec can also be changed to callback model to better match gUM
- Use of DOM Errors
  - Recommendation from <u>http://lists.w3.org/Archives/Public/public-media-capture/2013Apr/0158.html</u> is to make gUM errors be specific types of DOM Errors
  - Current spec defines ImageCaptureError, which can be transitioned to DOM Error readily



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