Vuforia Expert Capture: Answering 13 Questions About the New Workforce Productivity Solution

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Augmented reality solutions are empowering frontline workers by giving them easy access to critical information where and when they need it – on-the-job and at their fingertips.

In a recent webinar (https://www.ptc.com/en/resources/ar/webcast/introducing-vuforia-expert-capture/), Michael Campbell, EVP Vuforia Products, answered several questions about PTC's new Vuforia Expert Capture (https://www.ptc.com/en/products/augmented-reality/vuforia-expert-capture) solution, which uses hands-free augmented reality to scale procedural expertise across the workforce.

Here's a quick recap of the Q&A portion explaining why Expert Capture is the fastest and easiest way to create AR experiences that empower frontline workers.

What makes Vuforia Expert Capture different from other industrial AR solutions?

Vuforia Expert Capture pairs hands-free smart glasses with recording, editing, and publishing capabilities, so companies can quickly capture retraceable step-by-step procedural guidance from start-to-finish.

What devices are compatible with Vuforia Expert Capture?

Expert Capture is currently supported by Microsoft HoloLens and RealWear HMT-1. The Vuforia brand will also make all AR solutions compatible for the upcoming Microsoft HoloLens 2 (https://www.ptc.com/en/products/augmented-reality/vuforia-microsoft-hololens). Other devices like Vuzix glasses, Google Glass Enterprise, and leading digital eyewear like Magic Leap are being researched and may be supported in the future.

Do I need to create separate AR content for each device type?

No, you only need to create or "capture" content once. After you edit the procedure, it gets automatically templated and formatted for the various devices that we support.

If I author on HoloLens can I view the same captured content on a RealWear HMT-1?

Yes. However, viewing HoloLens captured content on a RealWear device will lose any unique features that are exclusive to HoloLens, like mission points.

Can I update published content as the procedural information changes over time?

Yes, you simply open the procedure back up in the editor, go to the step that's changed, bring in any newly captured content, and then update the procedure description and republish. Everyone that consumes the content afterwards will receive the updated version.

Can I bring outside content into the Expert Capture editor?

Yes, users can currently leverage video, images, or text from systems such as ERP and MES, or other "single sources of truth". Structured or tagged content must be copied and pasted into the procedure, with improvements coming soon. There will also be support for 3D animated sequences, 3D content and IoT data in the future.

Can I export step-by-step instructions from Expert Capture to Vuforia Studio?

You can export instructions from Expert Capture to a Word document, which can be easily brought into Vuforia Studio (https://www.ptc.com/en/products/augmented-reality/vuforia-studio#_ga=2.179145060.1540909563.1559513670-1020235892.1524579125). Over the next year, a convergence of Vuforia capabilities will allow you to mix remote expert assistance with expert captured content and pre-authored 3D and IoT content in a seamless AR experience.

In future updates will it be possible to integrate Vuforia Chalk with Expert Capture?

R&D is working on integrating Vuforia Chalk and Expert Capture so trainees out in the world can have the ability to invite a remote expert to join them ad-hoc during their Vuforia Expert Capture experience.

Is ThingWorx required for Expert Capture users?

Expert Capture does not require a ThingWorx subscription. However, the Expert Capture roadmap does include future integration with ThingWorx, so users can expose IoT data or use data from ThingWorx to guide a procedure (i.e. don't proceed with the procedure if a machine's temperature is above a certain level).

Does Expert Capture need internet connectivity to work?

Generally, yes. Users can capture content on the HMT-1 without internet connectivity, but to view the procedure you would to access it from the server. The ability to cache a procedure so users can consume it offline is coming. HoloLens does require internet connectivity for the location awareness feature.

How does voice-recording work in loud, noisy areas?

Though voice recording isn't necessary to capture instructions, the HMT-1 and HoloLens devices both received high grades in performance testing.

Can captured content be translated to different languages?

The way that a user authors text today is by listening to the video and transcribing spoken instructions, but there are several improvements coming to that process. The first is to have text transcribed automatically, using cognitive services that convert spoken word to text. The second is to incorporate company or industry specific dictionaries, so products names and specific terminology that isn't recognized by Siri will be recognized. The third is the ability to translate text that's already been captured to other languages.

Where can I learn more about Vuforia Expert Capture?

Watch the on-demand webinar (https://www.ptc.com/en/resources/ar/webcast/introducing-vuforia-expert-capture/) to see how you can improve workforce productivity and reduce waste, re-work, and downtime using Vuforia Expert Capture.