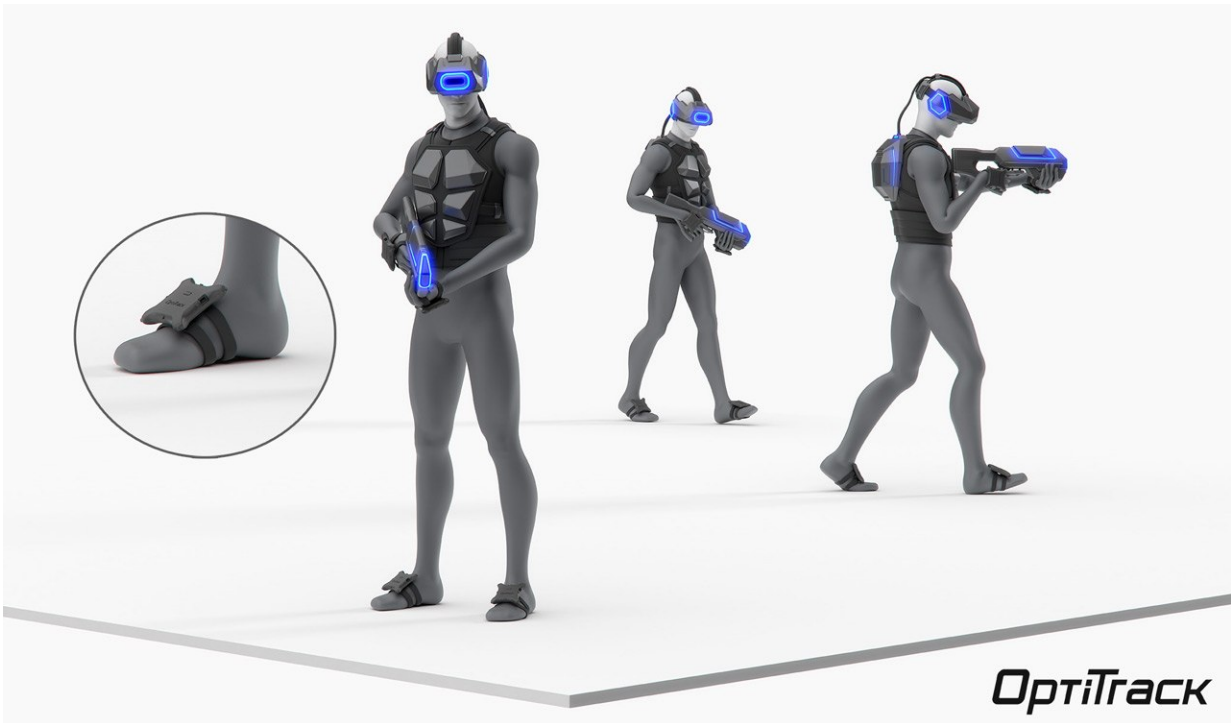


# OptiTrack shows new advances in wide-area VR tracking at Los Angeles event

August 2 2017, by Nancy Owano

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Credit: OptiTrack

(Tech Xplore)—New signs that the techies are keen on getting the VR parties started on better levels: A multi-layer virtual reality experience is possible with OptiTrack's news of technology advancements.

The two advancements, showcased at SIGGRAPH in Los Angeles, are

## (1) Full-Body Motion Tracking and (2) Self-Calibrating Tracking Systems.

All in all, "OptiTrack has delivered the "missing links" for arcade VR with two key advancements on [display](#) at SIGGRAPH," said *Animation Magazine*.

These are the two further iterations for its [virtual reality](#) tracking technology and Senior Silicon Valley Correspondent Janko Roettgers in *Variety* on Monday reported what they are all about.

"The new solution is based on a kind of puck that players in VR centers and arcades can attach to their hands and feet. Combined with any data gathered from tracking their VR headsets and any additional equipment, these pucks will help to enable whole-body tracking in multiplayer virtual [reality](#) worlds."

Active pucks are attached to the hands and feet of each participant. The pucks are powered with a rechargeable battery.

What has *Engadget's* Jon Fingas interested in the announcement: "Body tracking tends to be quite limited, so it's not uncommon to see generic animations and herky-jerky movements from your fellow players. OptiTrack hopes to fix that."

Fingas said, "Attach it to your hands and feet and you should get accurate positional tracking that reflects more natural movements, such as aiming a weapon or peeking around a [corner](#)."

Participants will see [other](#) players through their VR HMDs.

"Full-body motion tracking and self-calibrating OptiTrack systems have been at the very top of the list for all of our VR arcade customers," said

Brian Nilles, OptiTrack's CSO.

*TechRadar's* Andrew London noted how the devices attach to a user's hands and feet so that their position can be tracked in [space](#).



OptiTrack 'Pucks' attached to the hands and feet of participants deliver real-time animation. Credit: OptiTrack

*Develop*, a site focused on the games development sector, wrote about the showcased advancements too. Sean Cleaver talked in terms of an all-in-one tracking solution for location based VR. New advancements are for the company's wide-area VR tracking technology, primarily used for out of home VR systems, he said.

Where would the impact be seen?

"The company's newest system of cameras could make it more accessible than ever for companies to [create](#) large, warehouse-sized tracking environments for location-based entertainment and VR arcades," said *UploadVR*. Cleaver similarly said the [focus](#) is going to be for single and multi-site VR setups like arcades,

The technology is being described as "a low latency, real-time stream of every player's position, orientation and skeletal pose in the entire playing area."

The pucks are described as small (3.75" x 3.75") and lightweight (3 ounces).

So how does this translate in a play scenario?

*Develop* said it "means that other players can be seen through the VR head mounted display, with a real-time stream of a players position and skeleton pose." It said this was via the OptiTrack pucks on a player's hands and feet.

As for the second advancement, it is all about calibration. *Develop* said that this will allow staff responsible for the VR arcade setups to do less when it comes to maintenance.

The company push has been to make VR experiences as "plug-and-play" as possible.

"OptiTrack's continuous calibration removes the need for the 'wand wave' that has been a daily component of motion capture and tracking systems for over 30 years. No calibration maintenance is required following initial [installation](#)."

"The OptiTrack sensors will be able to track a user in a [setting](#) 10,000

feet square. Think indoor VR paintball," wrote Andrew London in *TechRadar*.

The SIGGRAPH conference is an event focused on computer graphics and interactive techniques.

**More information:** [optitrack.com/motion-capture-virtual-reality/](https://optitrack.com/motion-capture-virtual-reality/)

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