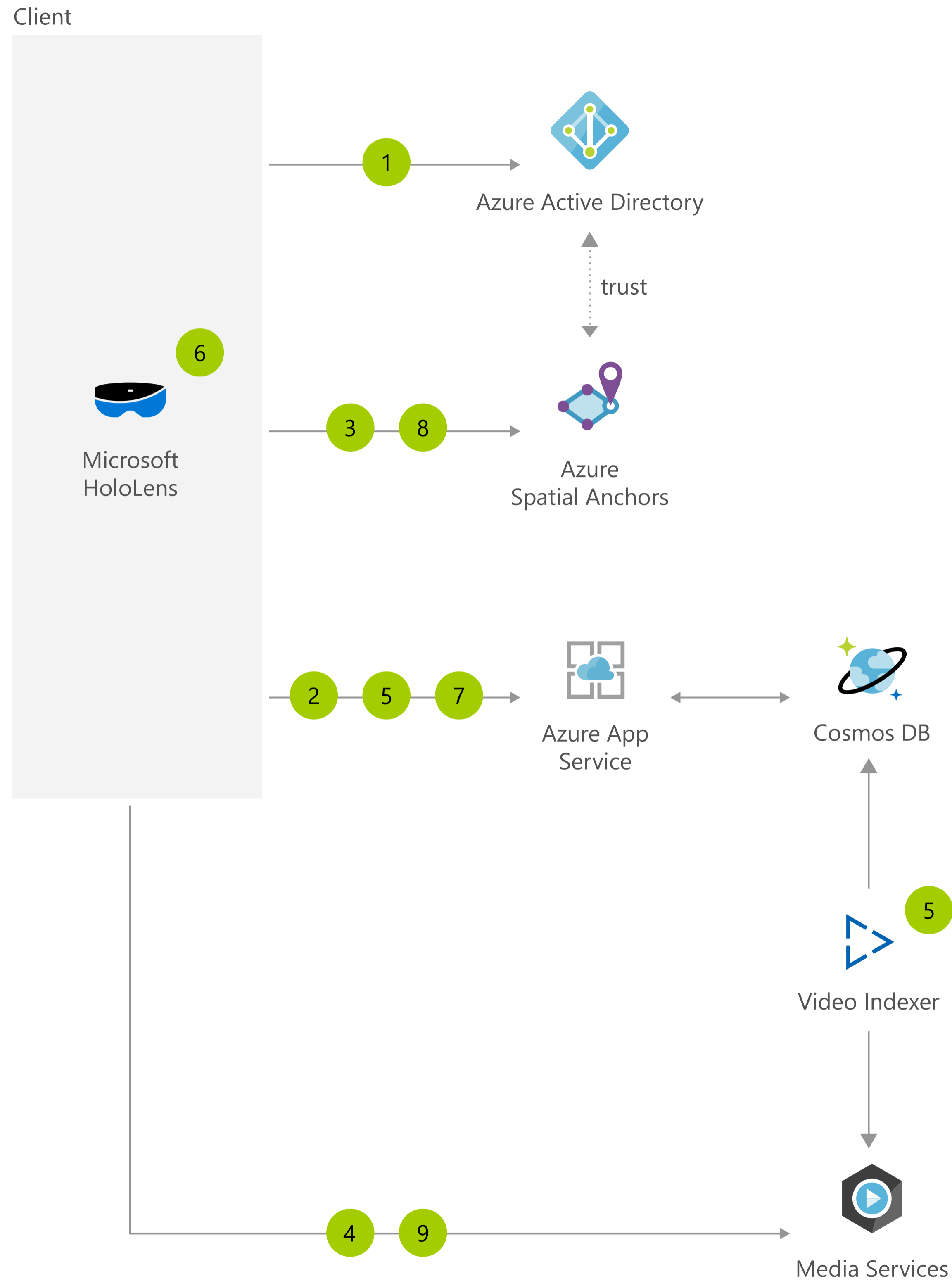


# Training powered by mixed reality









## Architecture overview

Train employees with persistent instructions in the physical context of their work. Using mixed reality, you can jump start employee comprehension with hands-on, screen-free experiences. And with Azure Spatial Anchors, you can place, visualize, and return to directions, communicating complex ideas more effectively to close skills gaps.

- 1 The user creating the training session authenticates using their AAD credentials from HoloLens.
- 2 The app connects to its own web service to create a training session; metadata about that training session is stored in Cosmos DB.
- 3 The user scans the environment and places a first anchor where the first step of the procedure needs to happen. The Azure Spatial Anchors service validates that the user has sufficient permissions in AAD to create anchors, then stores it.
- 4 The user takes a video of the procedure and uploads it to Azure Media Services.
- 5 The app saves against its web service the anchor ID for that first step, alongside a link to the video.
- 6 The user, in the same session, then moves on to step 2, places an anchor there, and again records a video of the procedure and saves the resulting anchor ID and video link to its web service. That process is then repeated until all steps in the procedure are executed. As the user moves from step to step, previous anchors are still visible with their respective step number.
- 7 A trainee comes in, selects the training session, retrieves anchor IDs and links to videos that are part of the procedure.
- 8 The trainee scans the room to find the anchors indicating the real-world location of each step in the procedure. As soon as one is found, all anchors are retrieved and shown in the app.
- 9 The trainee can then retrace the exact steps of the lab technician who created the training, and view holographic videos of each step at the right location in the lab.

## Azure products used in this solution

-  Azure Active Directory
-  Azure App Service
-  Microsoft HoloLens
-  Cosmos DB
-  Media services
-  Azure Spatial Anchors
-  Video Indexer