Hacking Barney the dinosaur for fun (no profit)



October 26, 2010



Raymond Chen

Many years ago, Microsoft produced a collection of interactive toys called ActiMates, and one of the features was that <u>television programs could broadcast an encoded signal which would enable the toy to interact with the program</u>. The idea would be that the Barney doll would do something that was coordinated with what was happening on *Barney & Friends*.

When this came out, a bunch of us wondered what it would take to hack into the device and get Barney to say and do, um, very un-Barneyish things. One of us managed to get a schematic for the device, but since none of us was an electrical engineer, that pretty much dead-ended the project.

Over ten years later, I learned that we weren't the only people to get that idea. I met someone who told me that he managed to get his hands on the internal devkit for the ActiMates series and control a Barney doll from his PC. Not satisfied with being limited to the built-in Barney phrases, he was able to "take additional creative steps with the devkit" to stream his own replacement audio to the device (although he was never able to get the sound quality of his streamed audio to sound as good as the built-in phrases). As a result, he could make Barney say whatever he wanted, and if he really felt like it, he could wake up all the Barney toys in his apartment complex at midnight and give orders to his robot army of purple dinosaurs.

The catch was that his robot army most likely would have consisted of just one robot.

Bonus reading: <u>SWEETPEA</u>: <u>Software Tools for Programmable Embodied Agents [pdf]</u>, Michael Kaminsky, Paul Dourish, W. Keith Edwards, Anthony LaMarca, Michael Salisbury and Ian Smith, CHI'99.

Raymond Chen

Follow

