

The Emergence of Networking Abstractions and Techniques in TinyOS

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A survey of emerging abstraction trends in the development of tinyOS

first off... I want to state that these surveys by collaborations of experts seem like experts doing an overly good job at a simple, yet important, task. In the end it usually doesn't accomplish anything new, and glazes over the subject too much to do it justice.. however, it doe

the observations of changes to tinyOS make sense and are clearly communicated.

Some of the observations seem quite obvious from working with tinyOS, such as those discussing the different routing protocols (tree, ad-hoc, etc..), and the sense that they are application specific makes sense... which would seem to be the case when dealing with embedded devices (especially small sensors). I guess the greatest things I drew from this was a general overview and broad understanding of where tinyOS is right now, and what abstractions are already common and well supported (previous work) vs stuff that must be application specific. Which would be most useful if I do work with tinyOS in the future. However, obviously this type of paper doesn't really contribute new ideas... just a fresh overview of what has happened... good paper though

As far as what it could have done different.

I would like to have seen more solutions, or at least general solutions, to limiting power consumption. They seemed to comment on it much more than make clear what you can and can't do for power consumption in certain cases. I guess the focus was just the abstractions that have been developed.. so maybe their just hasn't been a lot of consensus about this stuff.

But, with how important power consumption is to autonomous sensor nodes...or maybe there has already been a lot of work done at very low levels (whether that be the hardware of low level communication protocol details they glazed over).

But actually overall, not much to complain about, good survey on a useful topic.

One of the papers I will definitely keep around for reference...