

# Understanding File Access Mechanisms for Embedded Ubicomp Collaboration Interfaces

Anthony Collins, Judy Kay, Rainer Wasinger  
School of Information Technologies  
University of Sydney  
fanthony,judy,wasingerg@it.usyd.edu.au

Anastasia Bezerianos, Gregor McEwan,  
Markus Rittenbruch  
Hxl Braccetto  
National ICT Australia  
{a.bezerianos,gregor.mcewan,markus.rittenbruch}  
@nicta.com.au

## ABSTRACT

The ubiquitous computing vision includes Single Display Groupware (SDG) devices embedded in our normal environment. This paper explores the nature of interfaces for supporting people in accessing their files on such displays. To do this, we designed a study comparing people's interaction with two very different classes of tabletop file system access interface: Focus explicitly designed for tabletops and the familiar hierarchical Windows Explorer. We designed a within-subjects double-crossover study where participants collaboratively completed 4 planning tasks. Based on video, logs, questionnaires and interviews, we conclude that both the classes of interface have a place. Notably, Focus contributed to improved collaboration and better use of the interface. Our results inform a set of recommendations for future interfaces for this important class of interaction, supporting access to files for collaboration at tabletop devices embedded in the environment.