

Application Services for Smart-Home Documents

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Abstract- This work describes the use of application services to manage and control smart homes using documents written in text format. The documents are used to inquire and command the status of smart home devices in several home system for temperature regulation, water and electricity consumption. Applications services are computer scripts executed, on user request, from the menu bar or keyboard shortcuts, while an application is open. The user highlights a text contained in the document to identify the input command to control the devices in the home. Text editors, word processors, organizers and many other applications were tested, to highlight text, as inputs. Multiple inputs separated by commas are treated as a list of command sequences or scenarios. The scripts discover network parameters, device type, configuration, status, and syntax of the user request before executing the appropriate command. The scripts are generic to all homes and require no configuration, while the documents are specific to each smart home installation and they lists all the installed devices with available commands and other resources for the user may use to manage and control a home. Document templates are available for the user to customize commands using the available functions recognized by the scripts. This document is an example of a smart manual used by the author to control its smart home from its computer.

Keywords- Home Automation; Smart Homes; Smart Documents.