Home Automation Layer for Yocto

- General Idea :

Integrating in Yocto Project an open source home automation layer that is capable of using all of the today's industry protocols like:

- X-10
- KNX/EIB
- Z-Wave
- EnOcean
- Insteon PLC

Control is provided for Media, Climate, Lighting to Security and Telecom via mobile phone or pc. The general idea is having a device connected on the internet with a bluetooth adaptor (depending on the protocol used), running the software and being able to control the special adaptors mounted in the house.

- Open source Home automation :

The open source software used for this application is LinuxMCE.

LinuxMCE brings together a number of software components in an integrated environment. It is a collection of many pieces of open source software. Each LinuxMCE installation is a custom mix made of a selection of devices, plug-ins, and other modules. LinuxMCE Home's primary documentation aims to explain how LinuxMCE works, how to install it, set it up, and use it, if you have a standard installation made with devices and plug-ins from the HCL. Please start with devices that are known to work with LinuxMCE, then move on to more advanced things.

Here is a list of the software components that make LinuxMCE run:

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Platform/software used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating system</td>
<td>Kubuntu</td>
</tr>
<tr>
<td>TV &amp; video recording</td>
<td>MythTV / VDR</td>
</tr>
<tr>
<td>Telephony</td>
<td>Asterisk</td>
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<tr>
<td>Home automation</td>
<td>Pluto</td>
</tr>
<tr>
<td>Surveillance camera recording</td>
<td>Motion</td>
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<tr>
<td>Video plaback</td>
<td>Xine</td>
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</tbody>
</table>

Each software module has a detailed section which explains how to use, configure, and program it. The LinuxMCE Home Software Sections is a menu that lists all the software modules included in LinuxMCE. You can use it to explore each of the software components that are part of LinuxMCE.
Connection to the devices and also the control is provided in the wiki page:

http://wiki.linuxmce.org/index.php/LinuxMCE_Admin_Website#Scenarios

The project also provides remote control via mobile phone over the internet of the devices interconnected in the house.

SVN CODE can be found here: http://svn.linuxmce.org/svn/trunk/

ISO image can be found here: http://linuxmce.iptp.org/release/LinuxMCE-8.10-final.iso

Latest Version of software: 8.10

License: http://www.linuxmce.org/PPL.pdf

There are also many other open source solutions in this matter, but as far as I researched this one was complete and offered to the end-user all that it needed to implement his own home automation system with ease.

The other candidates are:

- http://www.domogik.org/
- http://www.openami.de/
- http://misterhouse.sourceforge.net/
- http://lifedomus.blogspot.com/
- http://www.opensourceautomation.com/
- http://www.linuxha.com/linuxha/
- http://www.catrpillr.com/

Any suggestions are welcome so don't hesitate to contact me at:

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