



Linux in embedded security devices

ESSENSIUM

Your needs
translated
into silicon



Contents

- 1 Company
- 2 System
- 3 Demo



Essensium



- Incorporated March 25, 2005
- Spin-off from IMEC and supported by Silterra
- Acquired Mind March 10, 2006
- Corporate Headquarters
 - Gaston Geenslaan 9, 3001 Leuven, Belgium
 - Tel +32 16 28 65 00 - Fax +32 16 28 65 01
 - www.essensium.com



SILTERRA





- Intelligent Data Capturing Systems
- Established in 1987
- Corporate Headquarters
 - Hellebeemden 9, 3500 Hasselt, Belgium
 - Tel +32 11 27 94 50 - Fax +32 11 27 58 32
 - www.idcs.be



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- 2 **System**
 - Overview
 - Design challenges
 - Planned extensions
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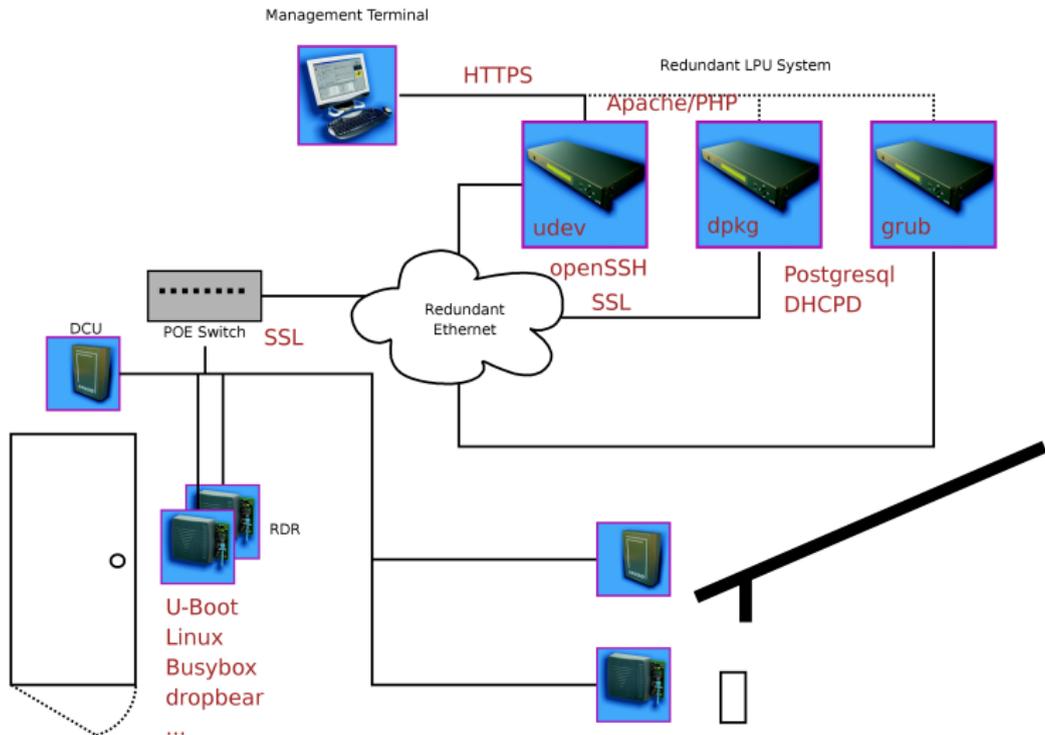


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Overview



Advantages

- Secure and reliable
- use of UTP cables
 - standard
 - available in most cases
- Robust system:
 - Redundant central component
 - Distributed control
 - Multi-site through IP network
- Fast development
 - Easy debugging (ssh)
 - Re-use of hard and software



Disadvantages

- Installation requires networking knowledge



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Tamper proof

- Signed software updates
 - base packages
 - optional packages
- openSSL
- remote monitoring



Single network

Use of existing network infrastructure

- use of DHCP (dynamic)
 - extra option added



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Planned extensions

- General IO controllers for sensing and special devices (e.g. AD convertor over SSL)
- Distributed scripting engine using lua
- Multifunction devices



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Demo

- USB devices in LPU
- Redundant power supply and network
- Debugging in shell
- Hardware reuse
- PoE
- Components



Questions & Answers

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