



CUCULUS
SMART ACCESS TECHNOLOGIES

2007-05-03

Press Release

Sharing included!

First operating system in zones for embedded

The new operating system ZONOS is based on Linux Kernel 2.6 and allows for the concurrent usage of embedded systems. Equal and isolated zones make it possible to protect the privacy of each individual user and enable Wi-Fi-Sharings for large service providers.

The operating system ZONOS (ZONed Operating System) is able to split the resources of a device and make them available to several users at utmost security. To do so, the system uses the principals of virtualization – with an innovative approach: ZONOS works with independent zones that cannot at all be controlled by a superordinate root-user or administrator.

The Cuculus GmbH has already assigned a patent for this principle and is using ZONOS to equip Wi-Fi Access Points with the capability of Wi-Fi-sharings. “Wherever different systems are intricate and – lacking sufficient security - additionally set up on “one-zoned“ systems – usually just several ESSIDs combined with VLANs – ZONOS already supports all necessary functions in line with the (corresponding) operating system, “ knows René Boeringer, managing director of Cuculus. “For the first time ever Wi-Fi-sharing as a business segment is made accessible to large internet providers“.

Although a private user and a provider share a physical device, the provider will be able to handle his zone like one of his standard hotspots.

The configuration of ZONOS runs easily and flexibly. If a zone of the current device owner is added via a mouse click, the automatic

fon +49(0)3677.66 853-0
fax +49(0)3677.66 853-9

mail info@cuculus.net
web www.cuculus.net
contact: René Böringer

Cuculus GmbH
Ehrenbergstraße 11
98693 Ilmenau

Bank Account
Deutsche Bank Erfurt
BLZ 820 700 24
KTO 440 242 6

Managing Directors
Dipl.-Ing. René Böringer
Dipl.-Ing. Gunnar Scharfe

Register Court:
District Court Jena
Register Number:
HRB 50 10 89
VAT-ID: DE 252 755 319
Registered Office Ilmenau



CUCULUS
SMART ACCESS TECHNOLOGIES

basis configuration is already preset. At the same time, each zone keeps the feature of isolation and acts independently: Each zone may be configured freely and uses its own mechanisms for configuration – including common versions such as web pages, SNMP or TR-069.

All zones are equal, meaning that they have the same right to change the division of resources of the total system. However this does not denote an even allocation of resources at any time. Has the allocation of the device been approved and arranged, in which way the resources are to be distributed among the zones, than the compliance of the agreement is technologically secured.

The concept of isolation makes it possible that neither zone is able to get access to configuration settings or data of other zones. “In this way not only the privacy of each party on the device is guaranteed, but also each zone is protected against malconfigurations of other zones“, Boeringer explains the special features of the system. “Likewise it is prevented that so called Denial of Service Attacks (DoS) on one zone will effect the other zones.“

In spite of the enormous functional complexity, ZONOS does not take up more resources than any conventional operating system. ZONOS runs on a large variety of hardware platforms and features little system requirements: 200 MHz processor, 8 MB Flash and 32 MB RAM at minimum.

For questions please refer to:

René Boeringer,
MD Cuculus GmbH, r.boeringer@cuculus.net, +49 176 22 15 27 22 or

Frank Siegmund,
PR Cuculus GmbH f.siegmund@cuculus.net, +49 172 212 42 42

fon +49(0)3677.66 853-0
fax +49(0)3677.66 853-9

mail info@cuculus.net
web www.cuculus.net
contact: René Böringer

Cuculus GmbH
Ehrenbergstraße 11
98693 Ilmenau

Bank Account
Deutsche Bank Erfurt
BLZ 820 700 24
KTO 440 242 6

Managing Directors
Dipl.-Ing. René Böringer
Dipl.-Ing. Gunnar Scharfe

Register Court:
District Court Jena
Register Number:
HRB 50 10 89
VAT-ID: DE 252 755 319
Registered Office Ilmenau