

Wireless RF-over-Ethernet becomes a reality from Radio Frequency Systems

Submitted by: Turtle Consulting Group
Sunday, 15 February 2009

RFS (Radio Frequency Systems), the wireless infrastructure specialist, is proud to unveil ClearFill Star, the world's first fully digital RF-over-Ethernet wireless indoor cellular coverage solution.

ClearFill Star uses a unique; cost efficient and digital IP-based approach that improves indoor wireless service by converting radio coverage into an IP based Ethernet application. With its unique approach ClearFill Star is able to reduce the total cost of ownership by up to 30-40% compared to other in-building solutions.

Central to its cost-effective appeal, says Peter Raabe, RFS' global product manager for Wireless Indoor Solutions, is the use of Cat 5e standard LAN cabling and switches.

"When allied to suitable Cat 5e network administration technology this means that carriers, enterprises and building owners can deploy ClearFill Star simply and inexpensively. And, when the time comes to maintain and/or reconfigure the system, the process is as simple as working with standard Wireless LAN systems," he said.

Designed to complement the company's ClearFill suite of wireless indoor solutions - also being shown at the GSMA World Congress - ClearFill Star is designed to offer carriers and enterprises access to a new set of options for harnessing and distributing RF signals inside buildings.

Indoor coverage, says Raabe, is provided by ClearFill Star via several remote radio heads (similar to WLAN access points) powered over Ethernet, whereas the indoor capacity is defined by the number of base station interface units connected to the cell sectors of a W-CDMA Node B.

Wireless meets Gigabit Ethernet technology

A key feature of ClearFill Star is its distribution of an RF signal from a Node B via a Gigabit Ethernet network connection. The use of an Ethernet network as a transport medium, says Raabe, cuts the cost of indoor wireless deployment since it uses existing structured cabling infrastructure.

"This dramatically reduces the cost of indoor wireless coverage, whilst at the same time supporting a highly flexible and scalable system. And, in common with RFS' Long Term Evolution (LTE) solutions being shown in Barcelona, ClearFill Star is future-proof, as the transport medium will evolve with the evolution of Ethernet technology," he explained.

Raabe says that all base station interfaces and active antennas (indoor remote radio heads) are powered via the Cat 5e cable (power-over-Ethernet) obviating the need for installing electrical supplies to each.

Another unique advantage of ClearFill Star is the possibility of managing the capacity of the base station, using a process of software-assigning to alter which remote radio heads are allocated to which

base station or base station sector.

“The principle behind this concept is that carriers and other installers can extend capacity on a central basis and then allocate the resource to the different remote radio heads according to changes in demand. This is what makes the technology as highly scalable and flexible as it is,” said Raabe.

“As an evolution, this concept of capacity management could be controlled dynamically. For example during the day, a shopping mall might distribute its capacity evenly between the retail outlets, the cinema complex and food courts. In the late evening, when the retail outlets close, the bulk of the indoor capacity can be reallocated automatically to the cinema complex and food courts,” he added.

“Whether the application is a private enterprise, a major university or airport campus, the addition of ClearFill Star to our ClearFill suite of wireless indoor solutions sets a new benchmark in the industry in terms of coverage enhancement, cost-effectiveness and flexibility. With ClearFill Star, our customers are guaranteed to maximize their return on investment,” Raabe concluded.

=ends=

Photo

Can be downloaded here:

http://fs.turtleconsulting.co.uk/pics/RFS0219_ClearFill_Star.jpg

Note to EDITORS:

Please follow the links for further Mobile World Congress press releases and supporting photographs :

- Mobile World Congress Preview (RFS0213)

Download here; http://fs.turtleconsulting.co.uk/PICS/RFS0213_APPROVED_RFS_Preview_GSMAMWC.doc

- LTE -“Ready when you are” says RFS (RFS0214)

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- High performance and healthy ROI go hand in hand with RFS’ new Optimizer CELLite base station antenna (RFS0222)

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- RFS Mobile TV antenna: compact, slim and lightweight features come as standard (RFS0221)

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- ClearFill Space 2: flexibility and customizable wireless coverage with virtually unlimited topology applications (RFS0220)
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- Wireless RF-over-Ethernet becomes a reality from Radio Frequency Systems (RFS0219)
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RFS Company background

Radio Frequency Systems (RFS) is a global designer and manufacturer of cable, antenna and tower systems, plus active and passive RF conditioning modules, providing total-package solutions for wireless infrastructure.

RFS serves OEMs, distributors, system integrators, operators and installers in the broadcast, wireless communications, land-mobile and microwave market sectors. As an ISO compliant organization with manufacturing and customer service facilities that span the globe, RFS offers cutting-edge engineering capabilities, superior field support and innovative product design. RFS is a leader in wireless infrastructure.

For more information visit: <http://www.rfsworld.com/>

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