

Using Diversity Path Mesh technology to control and manage self-service Photocopy Machines

The Mafil Corporation (www.mafil.co.il) is one of Israel's largest operators of self-service photocopy machines and printers. Among its clients are Israel's largest universities, institutions with tens of thousands of students. Photocopying of articles, notes and books is a hallmark of student activity. In turn, the university uses student satisfaction as a key parameter when deciding whether to renew an agreement with a photocopier operator.

Mafil operates several tens of copying machines at the Ben-Gurion University Campus, serving 17,000 students spread across tens of buildings in the campus area. Usually these machines are located in library basements. Originally, these machines were operated by inserting a magnetic card, provided by Mafil, which supported a certain number of copies. In order to better serve the market and to sell more copies, Mafil was interested in charging credit cards on the use of the photocopiers.

However, there was a serious barrier to implementing credit card validation. The Credit Card companies require online card validation for each transaction. Mafil could not connect its photocopiers to this system. Machines were located on University premises, and the University refused to grant Mafil access to its network. Worse, Mafil machines were located at the library basements, creating a very hostile environment for wireless signal transmission, as most basements were constructed of reinforced concrete.

After testing several solutions, none of which could create a wireless network to connect the machines in the various basements spread over the campus, Mafil chose Virtual Extension. The main reasons were the ability to create a network within the harsh environment and the ease of integration. Virtual Extension's unique Diversity Path Mash, with its dozens of wireless paths per node and long range, was the only technology capable of overcoming the harsh radio environment in the basements and as a result of the large distance between buildings. Mafil is not an R&D organization – integration had to be as simple as connecting wires.

Today, users of Mafil's photocopiers are able to charge their credit cards for copying transactions and Mafil is not dependent on an external network.



Mafil is the leading provider of copiers, printers, facsimile machines and document management on the Israeli market.

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