



Practical experience, market knowledge, and insight assisting customers on the path to greater profitability

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Alcatel-Lucent uses third-party validation for some effective marketing

Alcatel-Lucent announced that Isocore confirmed the scalability and resilience of Alcatel-Lucent's 7750 SR and 7705 SAR, as part of the IP/MPLS part of its META solution for mobile backhaul applications.

The company submitted the IP/MPLS part of its Mobile Evolution Transport Architecture (META) solution to undertake a series of large scale tests which verified that the solution can support both GSM/UMTS/HSPA and CDMA/EVDO backhaul applications: the common test bed simulated 1650 mobile base stations, with 604 CDMA/EVDO base stations (using Multiclass MLPPP with Multichassis APS protection) and more than 1000 GSM/UMTS/HSPA Node Bs.

This kind of testing can serve as useful validation by a third party, and provide solid support for marketing efforts. It addresses key issues that Alcatel-Lucent must overcome in order to drive greater deployment, and provides some proof points for operators considering greater migration to packet-based solutions.

3rd-party validation of the technology gives Alcatel-Lucent something they can hand to operators to try and overcome any potential initial hesitation that the operator might have regarding technology, as a way to drive more operators toward trials. This is far more effective as a marketing tool than is sponsoring an obviously biased "independently moderated" webinar, buying advertising, or endorsements based on far less depth of analysis.

Alcatel-Lucent's 7750 SR-12 and Agilent N2X were used to simulate all of the Node B and BTS equipment; DACS equipment; BSC/RNC functional blocks and all related traffic load and analysis for this event. A total of 4,874 active DS1 and E1 circuits (average of 2.8 DS1/E1 circuits per base station) were simulated in the network, while in total, over 1550 base stations using multilink bundles (MLPPP

and ATM/IMA), dual-homed with multi-chassis automatic protections switching (or both) were under test, for a total of 113 channelized OC3 and OC12 ports (using Any Service Any Port cards).

The independent performance verification conducted by Isocore tested and proved resiliency for scaled IP and IP/MPLS MBH, tested and verified several technologies including Multi-chassis APS combined with redundant pseudowires, IP/MPLS MBH for ATM, ATM-IMA and CES and MC-APS for scaled ML-PPP bundles deploying a large scale simulated environment using single product set. The ability to support large scale aggregation of multilink bundles was considered a key requirement for the test.

Evaluation of Circuit Emulation Services and Synchronization over Packet Networks for MBH deployments were also performed, including network synchronization for CES using adaptive and differential timing and 24 hour wander measurements of MTIE and TDEV. Results of the evaluation indicated a robust, stable, scalable transport architecture for CDMA/EVDO and GSM/UMTS/HSPA, and strong end-to-end resiliency - consistent low convergences times across all tested scenarios, resiliency of MC-APS for ML-PPP, ATM, ATM/IMA and CES under numerous failover (incl. catastrophic node failures) scenarios, ability to maintain ML-PPP states across network and preserve calls in progress, end-to-end pseudowire redundancy.

The testing also proved in a flexible packet synchronization options for TDM with stable implementations synchronous, adaptive, and differential timing.

The performance verification by Isocore is an industry first for mobile backhaul, and proved the ability of the solution to meet the needs of mobile service operators for backhauling disparate cellular networks across common IP/MPLS networks under demanding conditions.

This was good marketing, but we are waiting for a test bed that includes the microwave 9500 MPR and the 1850 TSS-5 that are also part of the META solution.

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