



WHEN THE SON SETS, THE RIC RISES, THE RAN GETS SDN'IZED, AND THE SMO SURGES – OCTOBER 2021

The evolution of mobile network automation from 3GPP self-organizing networks (SON) to radio access network intelligent controller (RIC) and service management and orchestration (SMO)



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Abstract

Defined by the Third Generation Partnership Project (3GPP) at the beginning of this century, SON (self-organizing network) algorithms configure and optimize mobile networks automatically without human interaction. As networks handle vast amounts of traffic and become more and more sophisticated and complex through the addition of several generations, SON algorithms are blended with machine learning (ML) and artificial intelligence algorithms. This report tracks the centralized SON (C-SON) software and services revenue market, provides size, forecast and vendor market shares, and analyzes the evolution of C-SON modules and use cases becoming apps in the RAN Intelligent Controller (RIC) needed in open RAN, open virtual RAN, and software defined RAN (SD-RAN) architectures. This report also tracks the O-RAN defined service management and orchestration (SMO) market and provides a breakdown between non-Real Time RIC rApps and near-Real Time RIC xApps.