**Software Defined Networking (SDN) and its applicability to Cloud, Data Centres and Data Centre Interconnect (DCI) networks.**

Whether you're building the next generation public cloud service, enabling value added services for customers or simply refreshing the data centre network, SDN and its applicability in a wide variety of use cases, is an unavoidable consideration. The future of networking will undoubtedly have a place for SDN and the advantages it brings as an enabler for highly agile networks, orchestration and network functions virtualisation (NFV) among others.  However, the physical network continues to play a critical role in the success of SDN implementations.  For example, traffic flows that occur between devices in a Data Centre (often referred to as East-West traffic) are increasing and SDN overlay networks will add to that.  If the underlay physical network design is not optimised for those flows, unpredictable and performance affecting behaviours will be exhibited in the overlay network.

This presentation will define what SDN is and what it is not as it delves into the some of the most common use cases for SDN and what Juniper Networks is doing to ensure customers have a simple, open and smart network architecture to support it. The challenge for network builders is the ability to manage the SDN network overlays and map those to the physical underlay as well as the integration to upstream orchestration and automation systems.   A look into Juniper's Junos Space Network Director will be presented to demonstrate how these challenges are being addressed.  Is your network SDN ready?

Al is a Consulting Systems Engineer with Juniper Networks, where he has been for over 4 years, and is a member of the Centre of Excellence team focused on Cloud Building technologies.  He has over 14 years experience in the IP networking industry, which spans multiple functions from network support engineer to technical pre-sales, culminating in his work as a consultant to customers on a wide range of technologies.  Al has extensive experience in the design, testing and implementation of large-scale networks in Service Provider and Enterprise environments.  Al has worked with some of the largest organisations nationally to help define their network technology direction in a manner that is consistent with industry best practice, whilst accounting for unique customers requirements.

Al holds a Bachelor Degree in Electrical and Electronic Engineering (Honours), is a Juniper Certified Internet Expert-Service Provider (JNCIE-SP #429), Certified Wireless Network Administrator (CWNA) and a member of Engineers Australia.