

Course ID <b>PNA3D</b> Course Duration <b>3 days</b>	Course Title Private Networking Advances Training
Aimed At	Corporate and government personnel whose job requires keeping up with the advances in Private Networking.
Prerequisites	<b>Private Networking Advances Training</b> is aimed at personnel with appropriate prior knowledge and experience.
Course in a Nutshell	<b>Private Networking Advances Training</b> , a 3-day course, covers private networks and security, CBRS private wireless network and backhaul, and other topics of interest to the participants. The course agenda is updated each time the course is taught to keep up with the advances in private networking. The course can be conducted WebLive <sup>TM</sup> (instructor-led online), onsite, or as a combination of the two. It's available worldwide.
Customize It!	We can tailor the included topics, tech level, and duration of <b>Private Networking</b> <b>Advances Training</b> to your team's technical requirements.
Outline	Private Network and Security
	<ul> <li>Advantages of Private Networks</li> <li>Private Wireless Network Use Cases</li> <li>Mission Critical Services in 5G NR</li> <li>Basics of Security Mechanisms <ul> <li>IPSEC</li> <li>Symmetrical and Asymmetrical Encryption</li> <li>Authentication; TLS Versions</li> <li>How SSH Works</li> <li>What Is HTTPS</li> </ul> </li> <li>5G NR Security, Radio Layer</li> <li>5G NR Security, Network Layer</li> <li>Security for 5G NR Private Network</li> <li>Security of Mission Critical Communications</li> <li>Zero Trust Security Architecture</li> <li>Zero Trust Development for Private Wireless Networks</li> </ul> <li>CBRS Private Wireless Networks Metworks</li>
	• LTE Tol +1 (703) 345 4375



- o 5G-NR
- Private Wireless Network at 6 GHz
  - o WiFi 6E
  - 3GPP 5G NR-U
- Implementation of Private Wireless Network for Mission Critical Services
- Non-Public Network Deployment Options
  - NPN with different RATs
  - NPN in different Spectrum Ranges
  - o Multiple NPN Radio and Core Network coordination
- CBRS for Mission Critical Services
- 5G NR Spectrum Planning for Public Safety and Mission Critical
   700 MHz Deployment in 5G NR
- Backhaul for Private Wireless Networks
- Technology Choices for Mission Critical Backhaul
  - Integrated Access Backhaul (IAB)
    - Overall Architecture
    - Protocol Stacks
  - o Microwave
  - o Fiber
- Satellite Communications as Backhaul
  - 3GPP 5G NTN
  - LEO-Mega Constellation
    - Starlink
    - OneWeb
  - Mesh Networks

## **Recap and Discussion**

DCN MjNNf