

5G practical optimization Training in NSA and SA

5GWorldPro has become the leader on providing 5G Trainings to particulars, service providers, operators, enterprises around the world and they have been recommended by many Professionals

In this 5G Technical course, we will discuss about 5G Practical optimization in non standalone and standalone, starting from 5G Coverage optimization, 5G Massive mimo optimization, 5G practical access from NSA to SA, and 5G mobility management from NSA to SA and more ...

Who would benefit:

This course is designed for RF engineers, optimization engineers, technicians and technical managers needing a solid foundation for understanding the principles of RF optimization and require applicable skills in 5G optimization and 5G trouble

Duration : 10 hours

Content :

1) 5G architecture and SA deployments

1. 3GPP timeline
2. Non-standalone and Standalone
3. Which 5G option to choose and when?

2) 5G Coverage enhancement solutions in NSA and SA

1. 5G coverage checklists
2. How to enhance NR DL and UL Coverage for C-band
3. Practical and theoretical 5G ENDC Coverage Vs 4G
4. Possible EN-DC combinations depending on UE
5. Supplementary Uplink and Super Uplink
6. 5G Carrier Aggregation and impact on SA
7. Practical and theoretical 5G SA Coverage Vs 4G
8. Case study in Kuwait

3) 5G Site selection criterias to achieve best performance

1. Typical 5G Network Construction Modes
2. FDD NR: How to Select a 5G First Frequency?
3. C-Band High-Value Site Ranking criterias
4. Factors impacting Massive Mimo Capacity
5. Massive Mimo products comparison
6. MetaAAU with 384 Antenna elements

4) 5G Massive MIMO Optimization

1. Key indicators for NR Coverage
2. Coverage Problem Analysis Process
3. Max transmit power calculation
4. Downlink interference with SSB Optimization solution
5. 5G Broadcast beam and 5G Coverage scenarios
6. 5G Massive MIMO Downtilt optimization

5) Common coverage problem analysis

1. 5G BF optimization
2. Weak coverage optimization
3. Overshoot Coverage optimization

6) DSS practical impact & optimization

1. LTE-NR dynamic spectrum sharing
2. Evolution paths towards 5G FDD in B1 or B3
3. DSS device ecosystem example
4. 5G DSS main impacts and features
5. MBSFN Option for DSS
6. Impact of UE supports "LTE-CRS rate matching"
7. DSS Architecture impact

7) 5G NSA Practical access issues

1. ENDC strategy and combinations
2. Event B1 optimization
3. Blind PSCell configuration
4. 5G measurement Gap

8) 5G NSA Access call flow and access cases

1. NSA access procedures on the LTE Side
2. NSA access procedures on the access preparation
3. NSA access procedures on the NR air interface
4. 5G RACH Parameters optimization

9) 5G Anchor optimization

1. Anchoring optimization
2. LTE EN-DC Anchoring Strategy
3. Experience sharing : 5G NSA Anchoring Proposal
4. Smart anchor solution
5. Adaptive anchor solution

10) 5G Practical access issues in SA

1. 5G SA Call flow
2. SA Access Problem Overview
3. The UE does not initiate an RRC connection setup request.
4. Random Access Failure
5. RRC Setup Failure
6. Abnormal NG Sig and NAS
7. Context Setup Failure
8. PDU Session Setup Failure
9. SA Access failure issue

11) 5G Mobility Management in NSA and SA

- 1) Mobility Management Architecture in 5G
- 2) Is Mobility in 5G different from 4G
- 3) Practical examples : Mobility improvement, DAPS ...
- 4) Mobility Management in NSA DC
- 5) Mobility Management in SA
- 6) Inter-gNodeB Handover Failure in SA mode

12) Moving from 5G NSA to SA

1. Migration to SA: NR bands
2. Migration to SA: Coverage and peak rates
3. Migration to SA : 5G core needs to be ready
4. N26 Interface
5. Is VoLTE is a prerequisite for SA Launch ?