

Hierarchical-sudo

Category	Item	Related O-RAN M-Plane/ YANG specification section(s)	
High Level Description	Architectural models	5.1.2 M-Plane architecture model	Hierarchical model
	IP version	5.1.3 Transport Network	IPv4
	Hash algorithm for data integrity	5.4 Security	HMAC-SHA2-256
	Cyphering algorithm	5.4 Security	AES128-CTR
“Start up” installation	O-RU identification by DHCP option	6.2.2 O-RU identification in DHCP	DHCPv4(Option: 60)
	VLAN Discovery	6.2.3 Management Plane VLAN Discovery Aspects	Supported
	IP address assignment	6.2.4 O-RU Management Plane IP Address Assignment	IPv4 configuration using DHCPv4
	O-RU controller discovery	6.2.5 O-RU Controller Discovery	DHCPv4 option 43
	DHCP format of O-RU controller discovery	6.2.5 O-RU Controller Discovery	O-RU Controller IP Address
	NETCONF Call Home	6.3 NETCONF Call Home to O-RU Controller(s)	call home(port4334)
	SSH/TLS Connection Establishment	6.4 NETCONF Connection Establishment	SSH: password-based authentication
	TCP port for SSH/TLS establishment (for test purpose)	6.4.1 NETCONF Security	No support
	NETCONF Authentication	6.4.2 NETCONF Authentication	password-based authentication
	User Account Provisioning	6.4.3 User Account Provisioning	default sudo
	sudo	6.5 NETCONF Access Control	Used
	nms	6.5 NETCONF Access Control	Used
	fm-pm	6.5 NETCONF Access Control	Used
	swm	6.5 NETCONF Access Control	Used
	NETCONF capability	6.6 NETCONF capability discovery	yang-library
Watchdog timer	6.7 Monitoring NETCONF connectivity	used	
O-RU to O-DU Interface Management	VLAN tagging for C/U/M-Plane	7.3 C/U Plane VLAN Configuration	Supported
	C/U Plane IP Address Assignment	7.4 O-RU C/U Plane IP Address Assignment	Not used
	Definition of processing elements	7.5 Definition of processing elements	a combination of VLAN identity and MAC address
	C/U Plane Transport Connectivity	7.6 Verifying C/U Plane Transport Connectivity	Not used (Loop-back Protocol (LBM/LBR))
	O-RU Monitoring of C/U Plane Connectivity	7.10 O-RU Monitoring of C/U Plane Connectivity	not used
Configuration Management	Baseline configuration	9.1 Baseline configuration	3 phase
Fault Management	subscribe notification	11.3 Manage Alarms Request to NETCONF Clients	default stream
Synchronization Aspects	Sync Capability Object	13.3 Sync Capability Object	Not used
Details of O-RU Operations	Activation, deactivation and sleep	15.3.2 Activation, deactivation and sleep	Used, except sleep

Hybrid-sudo+nms

Category	Item	Related O-RAN M-Plane/ YANG specification section(s)	
High Level Description	Architectural models	5.1.2 M-Plane architecture model	Hybrid model
	IP version	5.1.3 Transport Network	IPv4
	Hash algorithm for data integrity	5.4 Security	HMAC-SHA2-256
	Cyphering algorithm	5.4 Security	AES128-CTR
“Start up” installation	O-RU identification by DHCP option	6.2.2 O-RU identification in DHCP	DHCPv4(Option: 60)
	VLAN Discovery	6.2.3 Management Plane VLAN Discovery Aspects	Supported
	IP address assignment	6.2.4 O-RU Management Plane IP Address Assignment	IPv4 configuration using DHCPv4
	O-RU controller discovery	6.2.5 O-RU Controller Discovery	Entry 1) DHCPv4 option 43 Entry 2) Configured by o-ran-mplane-int.yang
	DHCP format of O-RU controller discovery	6.2.5 O-RU Controller Discovery	O-RU Controller IP Address
	NETCONF Call Home	6.3 NETCONF Call Home to O-RU Controller(s)	call home(port4334)
	SSH/TLS Connection Establishment	6.4 NETCONF Connection Establishment	SSH: password-based authentication
	TCP port for SSH/TLS establishment (for test purpose)	6.4.1 NETCONF Security	No support
	NETCONF Authentication	6.4.2 NETCONF Authentication	password-based authentication
	User Account Provisioning	6.4.3 User Account Provisioning	default sudo
	sudo	6.5 NETCONF Access Control	Used
	nms	6.5 NETCONF Access Control	Used
	fm-pm	6.5 NETCONF Access Control	Used
	swm	6.5 NETCONF Access Control	Used
	O-RU to O-DU Interface Management	NETCONF capability	6.6 NETCONF capability discovery
Watchdog timer		6.7 Monitoring NETCONF connectivity	used
VLAN tagging for C/U/M-Plane		6.2.3 Management Plane VLAN Discovery Aspects	Supported
C/U Plane IP Address Assignment		7.4 O-RU C/U Plane IP Address Assignment	Not used
Definition of processing elements		7.5 Definition of processing elements	a combination of VLAN identity and MAC address
C/U Plane Transport Connectivity		7.6 Verifying C/U Plane Transport Connectivity	Not used (Loop-back Protocol (LBM/LBR))
Configuration Management	O-RU Monitoring of C/U Plane Connectivity	7.10 O-RU Monitoring of C/U Plane Connectivity	not used
	Baseline configuration	9.1 Baseline configuration	3 phase
Fault Management	subscribe notification	11.3 Manage Alarms Request to NETCONF Clients	default stream
Synchronization Aspects	Sync Capability Object	13.3 Sync Capability Object	Not used
Details of O-RU Operations	Activation, deactivation and sleep	15.3.2 Activation, deactivation and sleep	Used, except sleep

NR-TDD-FR1-CAT-A-NoBF

Category	Item	Related O-RAN CUS-Plane specification section(s)	
General	Radio access technology	-	NR TDD
	TDD configuration	-	Any
	Nominal sub-carrier spacing	-	30 kHz
	SSB sub-carrier spacing	-	30 kHz
	Nominal FFT size	-	4096
	Total channel bandwidth	-	40MHz x 1CC
	Number of spatial/antenna streams	-	2
	Fronthaul Ethernet link	-	10Gbps x 1 lane
	PRACH preamble format	-	A3/B4/C2
	RU category	4.1.1	Category A
LAA	-	FALSE	
Delay management	Network delay determination	4.3.3	Defined Transport Method
	RU adaptation of delay profile information (based on O-DU delay profile and transport delay)	4.3.3.2	FALSE
	O-DU timing advance type	4.3.4-4.3.5, Annex B	Fixed Timing Advance
	T1a_max_up	4.3, Annex B	275 us
	T1a_min_up	4.3, Annex B	150 us
	T2a_max_up	4.3, Annex B	390 us
	T2a_min_up	4.3, Annex B	240 us
	Tcp_adv_dl	4.3.2, Annex B	125 us
	Ta3_max_up	4.3, Annex B	139 us
	Ta3_min_up	4.3, Annex B	114 us
	Ta4_max_up	4.3, Annex B	274 us
	Ta4_min_up	4.3, Annex B	114 us
	Ta3_max_up (scs=1.25kHz)	4.3, Annex B	Less than or equal to 1650us
	Ta3_min_up (scs=1.25kHz)	4.3, Annex B	More than or equal to 827us
	Ta4_max_up (scs=1.25kHz)	4.3.2-4.3.3, Annex B	More than or equal to 1810us
	Ta4_min_up (scs=1.25kHz)	4.3.2-4.3.3, Annex B	Less than or equal to 827us
	T1a_max_cp_ul	4.3.2-4.3.3, Annex B	100 us
	T1a_min_cp_ul	4.3.2-4.3.3, Annex B	10 us
	T2a_max_cp_ul	4.3.2-4.3.3, Annex B	285 us
	T2a_min_cp_ul	4.3.2-4.3.3, Annex B	143 us
	T12_max	4.3, Annex B	160 us
T12_min	4.3, Annex B	0 us	
T34_max	4.3, Annex B	160 us	
T34_min	4.3, Annex B	0 us	
Non-delay managed U-Plane traffic	4.3.6	FALSE	
C/U-Plane transport	Transport encapsulation	5.1.1-5.1.2	Ethernet
	Jumbo frames	5.1.2	TRUE
	Transport header	5.1.3	eCPRI
	eCPRI concatenation	5.1.3.1	FALSE
	eAxC ID DU_Port_ID bitwidth	5.1.3.1.6	4
	eAxC ID BandSector_ID bitwidth	5.1.3.1.6	4
	eAxC ID CC_ID bitwidth	5.1.3.1.6	4
	eAxC ID RU_Port_ID bitwidth	5.1.3.1.6	4
	Fragmentation	5.5	Application layer fragmentation
	Transport prioritization across C/U/S/M-Plane	5.3	None, planned
	Transport prioritization within U-Plane	5.3	False (Default U-Plane priority applies)
	Separation of C/U-Plane and M-Plane traffic	5.4	VLAN ID
Transport-based separation within C/U-Plane traffic	5.4	FALSE	
Digital Power Scaling	UL_gain_correction	8.1.3.2	0dB
Beamforming	RU beamforming type	4.1.1	No beamforming
	Beamforming control method	7.4, Annex J	Beamforming ID based (always "0")
IQ compression	U-Plane data compression method	8, Annex A	Block floating point
	U-Plane data IQ bitwidth	8, Annex D	8, 9, 12, 14
	IQ data frame format not including udCompHdr field	8.3.3.13	TRUE
C-Plane	Section Type 0	7.4.2	TRUE
	Section Type 1	7.4.2	TRUE
	Section Type 3	7.4.2	TRUE
	Section Type 5	7.4.2	FALSE
	Section Type 6	7.4.2	FALSE
	Section Type 7	7.4.2	FALSE
	"symIne" flag	7.4.5.3	FALSE (always set to '0')
	C-Plane for PRACH formats with preamble repetition	7.3.2	Single C-Plane message
	Section extension 1	7.4.6	FALSE
	Section extension 2	7.4.6	FALSE
	Section extension 3	7.4.6	FALSE
	Section extension 4	7.4.6	FALSE
	Section extension 5	7.4.6	FALSE
S-Plane	PTP Full Timing Support (G.8275.1)	5.2.3, 10.1, 11	TRUE
	PTP Partial Timing Support (G.8275.2)	5.2.3, 10.1, 11	FALSE
	Local PRTC	5.2.3, 10.1, 11	FALSE
	Topology configuration	11.2.2 10, 11.2.3 (for PLFS)	lls-C1, lls-C2, lls-C3