

MCX ONE CORE Server is the backbone service for enabling mission critical features over a broadband network. It developed and designed over cloud native architecture, hence it is highly scalable. MCX ONE CORE can be easily deployed, configured and maintained on the premises or even on the cloud itself.

MCX ONE CORE Supports various servers such as:

Identity Management Server (IDMS)

- o Manages authorisation and authentication of the users for enhanced security purposes.
- o To Provide secured access to resources such as data, systems and cloud platforms.

Configurations Management Server (CMS)

- o Manages a consistent state of the servers, system.
- o Provides centralised functionality to configure all the servers as well as other network elements.
- o Makes the system robust and reliable all the time.

Group Management Server (GMS)

- o This entity provides for management of groups supported within the vertical application layer

Key Management Server (KMS)

- o Provides an additional level of security by storing authentication keys separate from the storage system.

Network Management Server (NMS)

- o It provides the system administration, operation and maintenance. It helps system administrators to perform configuration, network monitoring, and network performance data collection.

Fault Management Server (FMS)

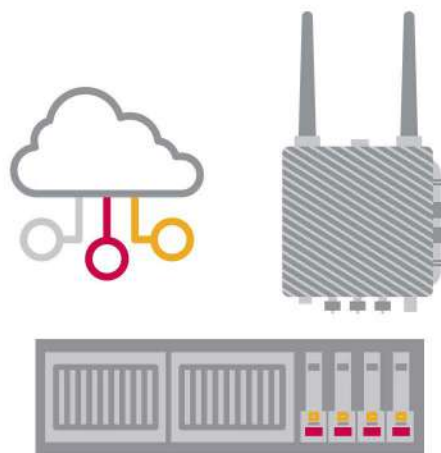
- o It helps to detect, isolate and correct malfunctions in the network, it also maintains and examine error logs, along with tracing and identifying faults. Different alarms dispensing on the type and severity of the fault/error stay in a persistent form until the fault/ error gets resolved,

Performance Management Services

- o Performance Management must help in the analysing of the performance of various subsystems of the MCX ONE CORE ENTERPRISE server and allow statistical reporting using Usage Detail Records (UDRs) to gauge how the services are being used as well for capacity planning.

Location Management Services (LMS)

- o To receive and store user location information



MCX ONE CORE

MCServices Backbone

Backup and Restore Services

- o MCX ONE Core Server is designed in a way that data, configurations and preferences of all subscriber applications are always stored on the server. This ensures that a backup of all configurations is maintained on the server and can be retrieved in the case of change of hardware devices for any subscriber.

Mode of Operation

- o Media/Participation Controlling Mode

MCX Features

- o MCX Voice / Messaging / Video Services as per Release 15

Interoperability & Security

- o Key loading of AES-256 to match with Keys of LMR technologies systems like DMR and P25 for future integrations.

Technical Specifications

SYSTEM	Processor	Intel Atom® x7-E3950 Processor, Quad Core, 2M Cache, 1.6GHz (2.0GHz), 12W
	Memory	8GB memory onboard
	BIOS	AMI SPI 128Mbit (supports UEFI/Legacy mode and Security Boot (optional))
GRAPHICS	Controller	Intel® HD Graphics
	Feature	OpenGL 4.2, Direct X 11.1, OpenCL 1.2, OGL ES 3.0 HW Decode: H.264, MPEG2, VC1, VP8, H.265, MPEG4, MVC, VP9, WMV9, JPEG/MJPEG HW Encode: H.264, MPEG4, VP8, H.265, MVC
	Display	1 x HDMI or VGA VGA: resolution up to 1920 x 1200@60Hz HDMI: resolution up to 3840x2160@30Hz
STORAGE	EMMC	Support EMMC 64 GB
EXPANSION	Interface	1 x Full-size Mini PCIe for 4G LTE module 1 x Full-size Mini PCIe for Canbus 1 x M.2 2230 (USB2.0/PCIe) for Wi-Fi module
ETHERNET	Controller	2 x Intel® I210AT PCIe (10/100/1000Mbps)
LED	Indicators	1 x Power Status LED
BOTTOM I/O	USB	2 x USB 3.0
	LAN	2 x GbE
	Combo	2 x RS232 and 2 x Can bus protocol
	Power	1 x 9~36V DC-IN
TOP I/O	Antenna Hole	2 x Antenna (LTE)
	Vent	1 x Vent
FRONT I/O	Display	1 x HDMI or 1 x VGA (optional)
	SIM Slot	1 x SIM card slot
	Antenna Hole	2 x Antenna (Wi-Fi)
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	TPM 1.2/ 2.0
POWER	Type	DC-in 9~36V
	Connector	M12 D-code
OS SUPPORT	Linux	Ubuntu 20.04 Server
MECHANISM	Mounting	Wall Mount
	Dimensions (W x H x D)	217 x 188 x 87 mm (with wall-mount bracket)

Products and services are continually improved. Specifications and features are subject to change without notice.