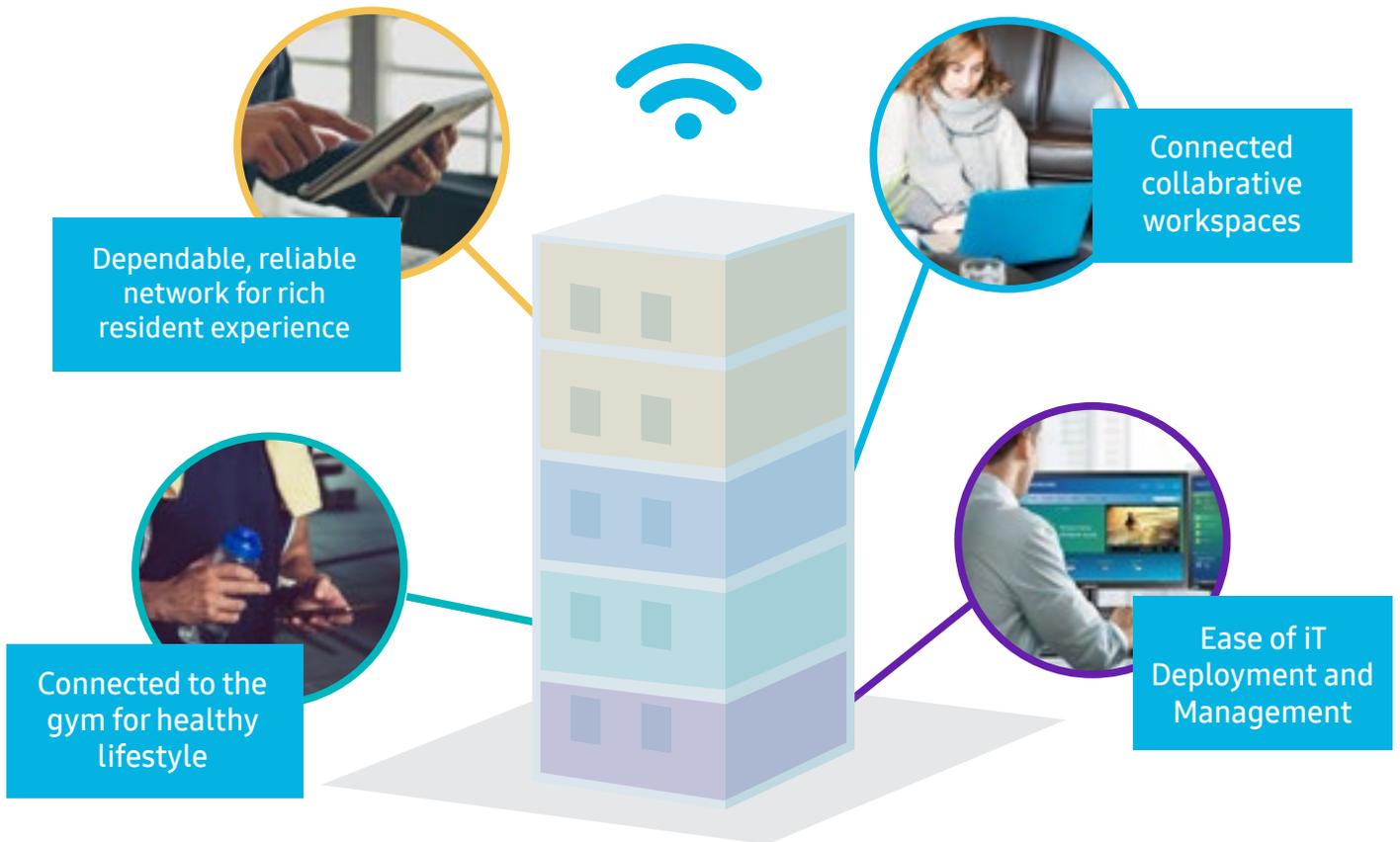# Micro-segmentation Solution for MDU Networks

The Technology

The Samsung Axis virtual Residential Gateway (vRG) solution solves many complexities for MDU operators and IT managers and empowers them to deliver a secure, simple and scalable managed Wi-Fi service. This allows them to seamlessly deploy a separate micro-segmented network for each tenant in a completely self-service manner through a single SSID. This technology is the ultimate solution for deploying a unified WLAN infrastructure in apartment buildings, condominium complexes, student dormitories and other forms of medium-to-high-density housing.

The vRG Creates a Personal Network Area that is Independent of Physical Space

The Samsung solution creates a personal network for each resident by micro-segmenting Wi-Fi access. This unique solution lets residents carry their connected experiences with them, as the end-user LAN can extend beyond units to areas such as the pool, gym, lobby and so on. Simply speaking, the residents can play their Xbox and PlayStation from anywhere in the building without worrying about Wi-Fi network security and bandwidth challenges

Dependable, reliable network for rich resident experience

Connected collaborative workspaces

Connected to the gym for healthy lifestyle

Ease of iT Deployment and Management

Centrally Orchestrated Secure Private Wi-Fi and Smart Devices

SAMSUNG AXIS

Enhancing the MDU Brand through Provisioning a Highly Secured and Efficient Wi-Fi Network

Having a separate micro-segmented network for each tenant provides unparalleled flexibility, functionality and security. Apart from instant provision and on-boarding, each tenant can access their own devices, while ensuring that their devices are securely fragmented and isolated, so no other tenant can access them. Furthermore, this ensures that tenants are unable to see each other's traffic, even at the packet level. The network operator defines a single WLAN that broadcasts a single SSID across the property, enabling residents to enjoy the connected experiences of their home from anywhere in the MDU premises. All this is done while providing ease of granular policy management for MDU operators through a central management system.

Self-Service Device Management

The centralized manager maintains database tables that associate the vRG, tenants and devices. Management of the mapping between devices and tenant vRG is entirely self-service with zero operator intervention. The tenant uses a browser to access the tenant portal when a wireless printer, game console, NAS server or any other headless device needs to be added or removed. Devices with integrated browsers will be redirected to the portal when they first connect to the network.

The Samsung Axis micro-segmentation solution provides a secured and dedicated personalized area wireless network with centralized management and intelligence, while providing a seamless and homogenous environment for all Samsung products within the MDU and the tenant unit.

SAMSUNG AXIS

Welcome

Device and Session Allocation

Manage Devices

Add Device

Active Devices - Expand All | Collapse All

Xbox One (b4:ae:2b:03:ac:0a) Port Forward
Device Info

Name	Xbox One		Save
MAC address			
Hostname			
Owner			
DMZ		Activate	
Usage		View Usage	
		Delete	

Device Port Forwards

Name	External Port	Internal Port	Protocol	Device		
xbox 3074	3074		tcp_udp	Xbox One	Update	Delete
			tcp_udp	Xbox One		Add

Session Info

Logged in		
IP address		
	Logout	

DJHNBPdisplayadapter (10:dd:b1:d6:1b:6d)
Bed Frame (00:06:56:51:ce:6c)
Neon Switch (7c:6b:8a:eb:78:87) Port Forward
Grey Switch (04:03:d6:77:06:0b)
Sony 65" TV Bedroom (d4:6a:6a:16:be:ad)
Smart Plug Fan (50:c7:bf:57:f1:b1)
Smart Watch (84:68:3e:02:fa:79)
Pixel (ac:37:43:de:fd:7d)
Smart Plug Thor's Cage (50:c7:bf:1a:d4:f8)
Smart Switch Garage (50:c7:bf:bd:f8:c0)
FireTV (10:ae:60:f9:a0:eb)
Win10Tower (38:2c:4a:8d:c5:3e)
Minecraft Server (00:0c:29:2a:c6:77) Port Forward

Inactive Devices - Expand All | Collapse All

Orange Kindle (74:c2:46:18:7e:47)
DJHmbp/15 WiFi (ac:bc:32:c7:5d:dd)
DJHmbp/13 WiFi (a4:5e:60:cc:45:08)
Xbox One X (0c:54:91:ac:c6:1a) Port Forward
PS4 Pro WiFi (f8:da:0c:f1:2f:98)

Port Forwarding

Name	External Port	Internal Port	Protocol	Device		
test	2244:2255		tcp_udp	Neon Switch	Update	Delete
xbox 3074	3074		tcp_udp	Xbox One	Update	Delete
minecraft	25565		tcp_udp	Minecraft Server	Update	Delete
xbox 49947	49947		tcp_udp	Xbox One X	Update	Delete
			tcp_udp	Disabled		Add

xbox-49947 Port Forward Utilization

xbox-3074 Port Forward Utilization

test Port Forward Utilization

minecraft Port Forward Utilization

Welcome

Network Reports

Top Data Consumers

Top Connection Consumers

Top Destination Hosts

Application Usage by Port

TCP Services

UDP Services

Event Trigger

Triggered Events

Transient Groups

Hourly Utilization

Daily Utilization

Daily Logins

Connections

xbox-49947 Port Forward Utilization

xbox-3074 Port Forward Utilization

test Port Forward Utilization

minecraft Port Forward Utilization

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