

## **ARConnect2IX**

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## 1. Service description

ARCONNECT2IX is a layer 2 connectivity to Internet exchanges in the region across the Middle East via MPLS network to give the customers low latency and high performance for internet traffic.

ARCONNECT2IX provides an MPLS based EVPN service built on a native IP highly redundant platform equipped with high-performance interfaces, allowing networks to scale to meet evolving traffic demands and connected via a high-capacity meshed network.

The MPLS network architecture is self-healing and fully redundant, utilizing dual Nodes in each country connected via dual diverse backhaul capacity ensuring maximum availability and minimum performance degradation.

This version of the service schedule describes layer 2 services only. The layer 3 services will be detailed in the next version.

## 2. Our Network Reach

Our ambition is to connect all major datacentres in the Middle East. At the moment, we are present in 4 datacentres:

- UAE – Datamena - DX1 Equinix, UAE IX
- UAE – Smarthub – Etisalat, Smarthub IX
- Bahrain – Globalzone – Batelco, Manama IX
- Oman – MC1 Equinix, Equinix IX

## 3. ARConnect2IX – Layer 2 services

### 3.1 Technical specifications

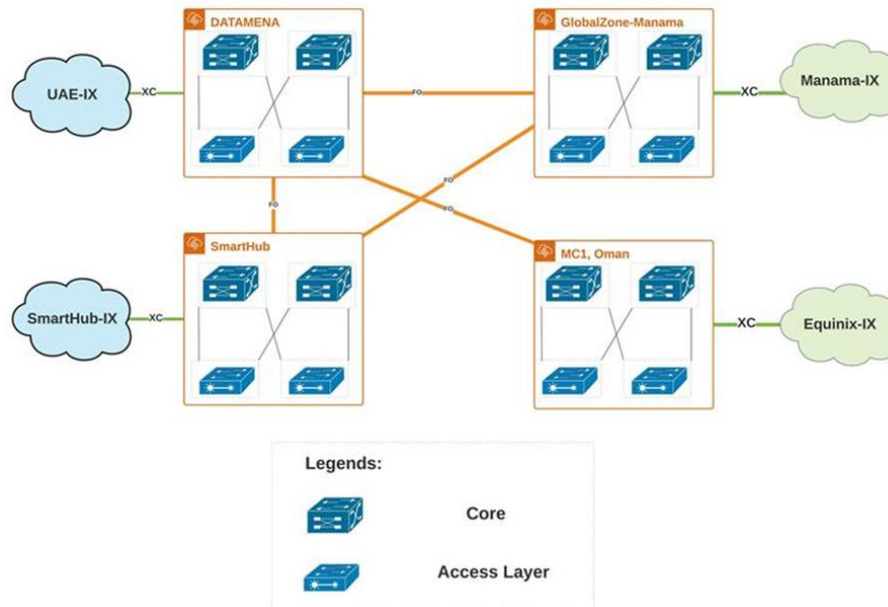
ARConnect2IX is a layer 2 MPLS based connectivity service which enables you to connect to any Internet exchange in the region.

The Service Demarcation Point (SDP) of the Ethernet Service is the access switch where an access port will be provided to the End User. The customer will then connect their router/IX capable devices to the ARC network to get connected to the internet exchanges.

The BGP configuration for the IX will be carried out by the customers and can get full BGP routing table. Using ARCs MPLS VPLS technology customers can connect to our different PoPs in the region with ease.

The ARCs MPLS network enables the customer to multiple internet exchanges via single trunk port with ARC network. The internet routing for the customer will be fast and reliable as the ARC carries the traffic via MPLS (Label switching network).

Customer can connect to any of the IX's in the region using ARCs MPLS architecture.



With the help of ARCs MPLS network, customers can connect to their desired IX's using secured and fast paths using our evpn BGP. Hassle free installation and cost cutting edge solution to connect the IXs in the region makes ARC a robust one stop connectivity provider.

## 3.2 IX capabilities

**Table 1 – Available Service Speeds (CIR)**

	UAE IX	Manama IX	Smart hub IX	Equinix IX
<b>Location</b>	datamena	GlobalZone	Smarthub	MC1
<b>Port</b>	Shared NNI Dedicated 1G Dedicated 10 G	Shared NNI Dedicated 1G Dedicated 10 G	Dedicated 1G Dedicated 10 G	Shared NNI Dedicated 1G Dedicated 10 G
<b>Bandwidth</b>	100 Mbps 200 Mbps 500 Mbps 1Gbps – 10 Gbps	250 Mbps 500 Mbps 1 Gbps 3 Gbps 5 Gbps 10 Gbps	1 Gbps 10 Gbps	1 Gbps 2 Gbps 5 Gbps 10 Gbps
<b>Redundancy</b>	Applicable only on the connectivity			

## 4. Service terms and conditions

### 4.1 Contract terms

The contract term is 12 Months.

At the end of the term, the service will be renewed on a monthly basis rolling until ceased by the Customer with 30 days notice.

### 4.2 Pricing and billing

The service pricing includes:

- **Port Charge:** Monthly Recurring Charge per port if applicable
- **Service Charge:** Monthly Recurring Charge based on service's specifications

The billing commences upon RFS.

### 4.3 Service provisioning and testing

A Service delivery manager will be assigned upon service order form signature and will be the single point of contact for the service provisioning and service management requests.

Service provisioning will be fulfilled after the cross connect delivery.

ARC will do their best to deliver the service within the timeline agreed in the service order form.

The standard port provisioning parameters are:

Table 2 - Port Parameters		
MTU Size	1542 or 9150 as standard, other options are available on request	For customers with multiple services to multiple destinations the default is 9212 less the MPLS overhead of 28 bytes
Customer Port Speed	1G / 10G	Customer ports can be dedicated for IX or can be multi use ports also providing ARCONNECT services
IX Port	10G Dedicated / Shared	Customers using a shared IX port do not pay a port charge as this is included in the service cost – Dedicated ports will be charged and will have an XC charge also
Encapsulation	None / Dot1Q / QinQ <sup>1</sup>	Shared IX Ports require the use of QinQ encapsulation

The standard service provisioning parameters are:

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Table 3 – Service Parameters		
MTU Size	1542	Allows for standard Internet traffic plus MPLS Overhead
CIR	As per Table 1	Service speed will be dictated by those available from the specific IX as laid out in Table 1
Encapsulation	None / Dot1Q / QinQ <sup>2</sup>	For services to shared IX ports, QinQ is required to ensure no VLAN clashes with other customers
Routing	Customers can choose reroutable or non-reroutable connectivity	The ARC mPLS network is built on an underlay of protected services from our underlying carriers, With an unparalleled level of availability across the region. However, if a customer wishes to further secure his service it is possible to have a second dedicated route with dedicated capacity as a standby at incremental cost.

### Testing and acceptance procedure:

ARC Solutions will issue a testing certificate as part of the handover pack. This testing will align to the ETHERSAM Y.1564 standard developed by the ITU and examples can be shared with the customer. In some instances where the EtherSAM capability is yet to be set up, a test can be run using RFC2544 parameters which will be shared with the customer in lieu of the EtherSAM certification.

## 4.4 SLA

ARC provides **24x7x365 technical support** service.

The **NOC team** is reachable via:

- ✓ **Phone:** +97145687333, +15856661456
- ✓ **E-mail:** [support@arcsolutions.me](mailto:support@arcsolutions.me)

ARC commits to the Service Level Agreement (“SLA”) defined in the table below:

ARC SLA	
Service availability	99.5%
Service provisioning	1 business day
Fault restoration (MTTR)*	4 hours for critical 12 hours for major 7 days for minor
Frame loss ratio	Less than or Equal to 0.03%
Jitter	Less than or equal to 3ms

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(\*) MTTR means Mean Time To Repair.

The Trouble Tickets shall be prioritized based on the relative severity of each Fault as follow:

SERVICE RESTORATION TABLE		
Fault	Criteria	MTTR
Critical	- Total loss of Service - Degraded Service (the Service is degraded to the extent that the Customer is unable to use.)	4 hours with customer update every 30 min till resolved
Major	- Degraded Service (the service is degraded, where Customer is able to use it) - Chronic Issue, where the Service has had a number of repeated unexplained Service failures.	12 hours with customer update every 90 min till resolved
Minor	-Non-Service affecting (a single non-circuit specific quality of Service inquiry)	First update within 5 hours and daily update till resolved

## 4.5 Service Credits

Service credits will apply only on the service availability. ARC commitment is reflected on the table below:

Availability	Maximum Minutes of Total Service Outage per month
99.5%	3h 39m 8s

The Service Availability Credits for Faults experienced on a Service are reflected in the table below:

Service Credits - Availability	
Unscheduled Downtime	Service credit as % of MRC
< 3 hours 59 min 59 sec	0 %
4 hours – 5 hours 59 min 59 sec	2 %
6 hours – 7 hours 59 min 59 sec	4 %
8 hours – 11 hours 59 min 59 sec	6 %
12 hours – 23 hours 59 min 59 sec	10 %
> 24 hours	15 %

### 4.6 Planned Maintenance

1. "Planned Maintenance" shall mean network configuration, design, grooming, rearrangement, upgrade, enhancements, repair, or maintenance of Services.
2. With respect to Planned maintenance relating to Customer's Service, ARC shall notify Customer in writing of Planned Maintenance, including its timing and scope, at least fifteen (15) calendar days in advance.
3. Planned maintenance shall be performed between the hours of 00:00-06:00 local time relevant for the location where the work is being performed.
4. Any planned maintenance time in excess of the Planned Maintenance allowance described in this clause shall be counted towards Unavailability.
5. For any unplanned emergency maintenance, ARC shall endeavour to provide Customer commercially reasonable prior notice of such emergency maintenance wherever possible.