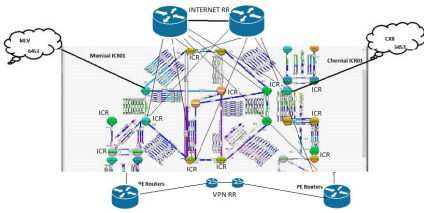


Internet Leased Line

ILL:-An Internet leased line is a premium internet connectivity product, delivered over fibre normally, which is dedicated and provides uncontended, symmetrical speeds, full-duplex. It is also known as an Ethernet leased line, DIA line, data circuit or private circuit.

Cacti View



TATA ILL Setup

TATA AS: 4755, **Teleglobe AS:** 6453

Backbone ICR locations:

Mumbai, Delhi, Kolkata, Chennai, Pune, Ahmedabad, Hyderabad, Bangalore, Ernakulam. Juniper MX960 is used at all ICR locations.

Internet RR's: Mumbai & Chennai

VPN RR's: Mumbai, Chennai & Ernakulam

Internet Gateway: Mumbai & Chennai

Transit Gateway: MLV6453 & CXR6453

ILL Products

PILL- Premium ILL
STDILL- Standard ILL
SILL- Shared ILL
CILL- Compressed ILL

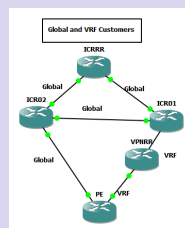
Reginal communities

Mumbai	4755:22
Ahmedabad	4755:79
Pune	4755:20
Delhi	4755:11
Kolkata	4755:33
Chennai	4755:44
Ernakulam	4755:48
Hyderabad	4755:40
Bangalore	4755:80

Service Communities

PILL	4755:99
STDILL	4755:199
VOIP	4755:299
IDC	4755:399
DSL	4755:499
SILL	4755:599
CILL	4755:699
Longer Prefix	4755:914

Global & VRF Internet Customer



ILL Routing

Forward Path : Forward path remains same for all customer category except in the case of PBR

Reverse Path :

#PILL,STDILL,IDC announced at all gateways and hence reverse traffic can take nearest gateway.
 #SILL,CILL only announced at US West Coast ,reverse path always from Westcoast
 #CILL compressed at gateway.

Effects on Latency

#PILL , STDILL, IDC customers get best latency as reverse path is via the nearest gateway from the destination.

#SILL,CILL faces higher latency to all destinations (except to those in Westcoast) as reverse traffic always enters 4755 via gateways at West coast.

Latency SLA (ms)

Product	U.S	Europe	APAC /ME
PILL	290	180	120
STDILL	290	180	120
SILL	NA	NA	NA
CILL	NA	NA	NA

Alcatel basic Commands

```
#admin display-config | match
Circui- ID context all
#show router VPRN-id
interface "Lag-Interface"
#admin display-config | match
"Lag- Interface" context all
#show lag Lag-Interface-Number port
#show router VPRN-id arp |
match "Lag- Interface"
#clear router VPRN-id arp
#ping router VPRN-id
Destination-IP source
Source-IP rapid count 100
#show router VPRN-id bgp
summary
#show router policy
Import/Export-Policy
Note: VPRN-id is the service
id. Its not required in IES
service.
```

Cisco Basic Commands

```
#sh interface description | i
Circuit-id
#sh interface Interface-id
#sh run int Interface-id
#sh ip arp vrf VRF-Name | in
Interface
#clear ip arp IP-Address
#sh ip arp vrf VRF-Name | in
Interface
```



Cisco Basic Commands (cont)

```
#ping vrf VRF-Name
DestinationIP so SourceIP
#sh policy-map interface Interface
#sh run vrf VRF-Name
#sh ip bgp vpnv4 vrf VRF-Name
summary
```

Juniper Switch Commands

```
1. #show interfaces descriptions |
match <Circuit ID>
2. #show interfaces <Interface
name>
3. #show configuration interfaces
<Interface name>
4. #show ethernet-switching table
interface <Interface name>
5. #show interfaces <Interface
name> extensive | match err
6. #show log messages | match
<Interface name>
```

Problem Statements

Severity-1

1.Link Down

Severity-2

1.No Browsing
2.Packet drops
3.Reachability issues for sites and destinations.
4.Low Throughput
5.Latency
6.Link Flapping
7.Slow Browsing
8.DNS resolution
9.Mailing issues.
10.Routing issues / BGP related issues.

Important Tools & Websites

1. **Cacti**
<https://172.31.6.190/cacti/plugins/weathermap/weathermap-cacti-plugin.php>
noc.service/Gold@2015

2. **MRTG for ILL**
<http://www.myview.internetaccess.vsnl.com/web/frames/gatewayFrame-soc/123tata321>

3. **MRTG for VPN**
<http://nethealth.tatacommunications.com/cgi-bin/nhWeb?func=mainChoice>
soc/TcL!23

4. **Cramer**
<http://cramerindprod/CramerOSS/Logout/SessionDefinition.jsp>

5. **BPM**
<http://10.209.19.190/TCLProcessUI/JS/SP/login/login.faces>

6. **Viznet**
<http://viznet.vsnl.co.in/loginform.php>

7. **Remedy**
<http://remwebprd:8081/arsys/forms/remappprd/SHR%3ALandingConsole/Default+Administrator+View/?cached=d05f3062>

8. **Sify**
http://ioninx.sify.net/ioni/index.phpadmin_313585/sify2013

Important Tools & Websites (cont)

9. **Traceroute**
traceroute.org

10. **MAC Address Lookup**
<http://www.macvendorlookup.com/>

11. **TTSL Portal**
http://ecrm.tatatel.co.in:8020/OA_HTML/AppsLocalLogin.jsp
BA80327001/jun@2015

12. **Geimini**
<http://180.179.36.7:8080/gptar/customer>
Customer1/Customer1

13. **RADB**
<http://www.radb.net/>

14. **Looking Glass 4755:**
<https://lg.tatacommunications.com:8080/>
6453: <http://lg.as6453.net/>

15. **WirelessOne**
<https://wirelessone/login/?next=>

16. **Whois IP**
<http://cqcounter.com/whois/>

17. **Report for 6453**
<http://reporter.teleglobe.com/gi.html>
inoc/inmc

18. **DNS Lookup**
<http://surya.vsnl.com:8080/cgi-bin/aclcheck/checkacl.cgi>
IPSOC/soc123

Important Tools & Websites (cont)

19 **Sector Utilization**
<http://172.31.5.87/MRTG/10.160.68.2150.html>
10.160.68.2 – BS IP
150/250 – IF value

