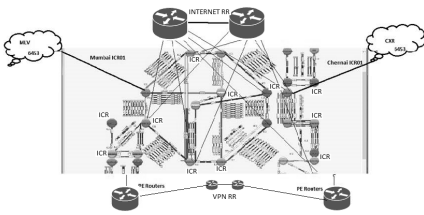


### Internet Leased Line

**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

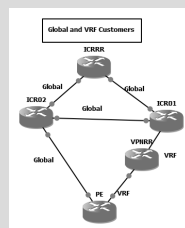
### Reginal communities

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>  
p  
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/Login/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.php>  
admin\_313585/sify2013

### Important Tools & Websites (cont)

9. **Traceroute**  
[traceroute.org](http://traceroute.org)

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

11. **TTSL Portal**  
[http://ecrm.tatatel.co.in:8020/OA\\_HTML/AppsLocalLogin.jsp](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/lg/>

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

