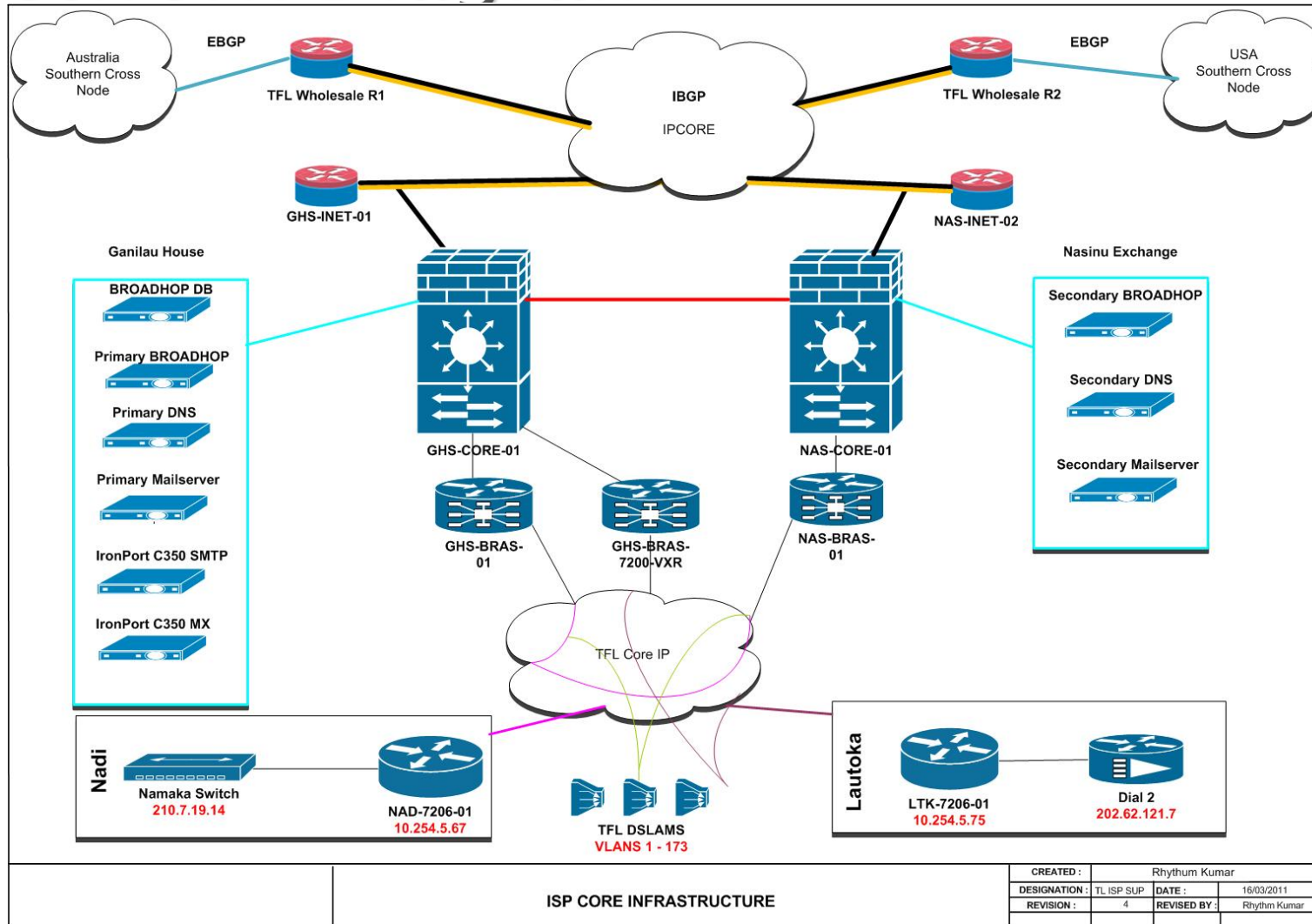




# Connect ISP Engineering Issues

Presenter: Rhythum Kumar  
Date: 2-7-2012

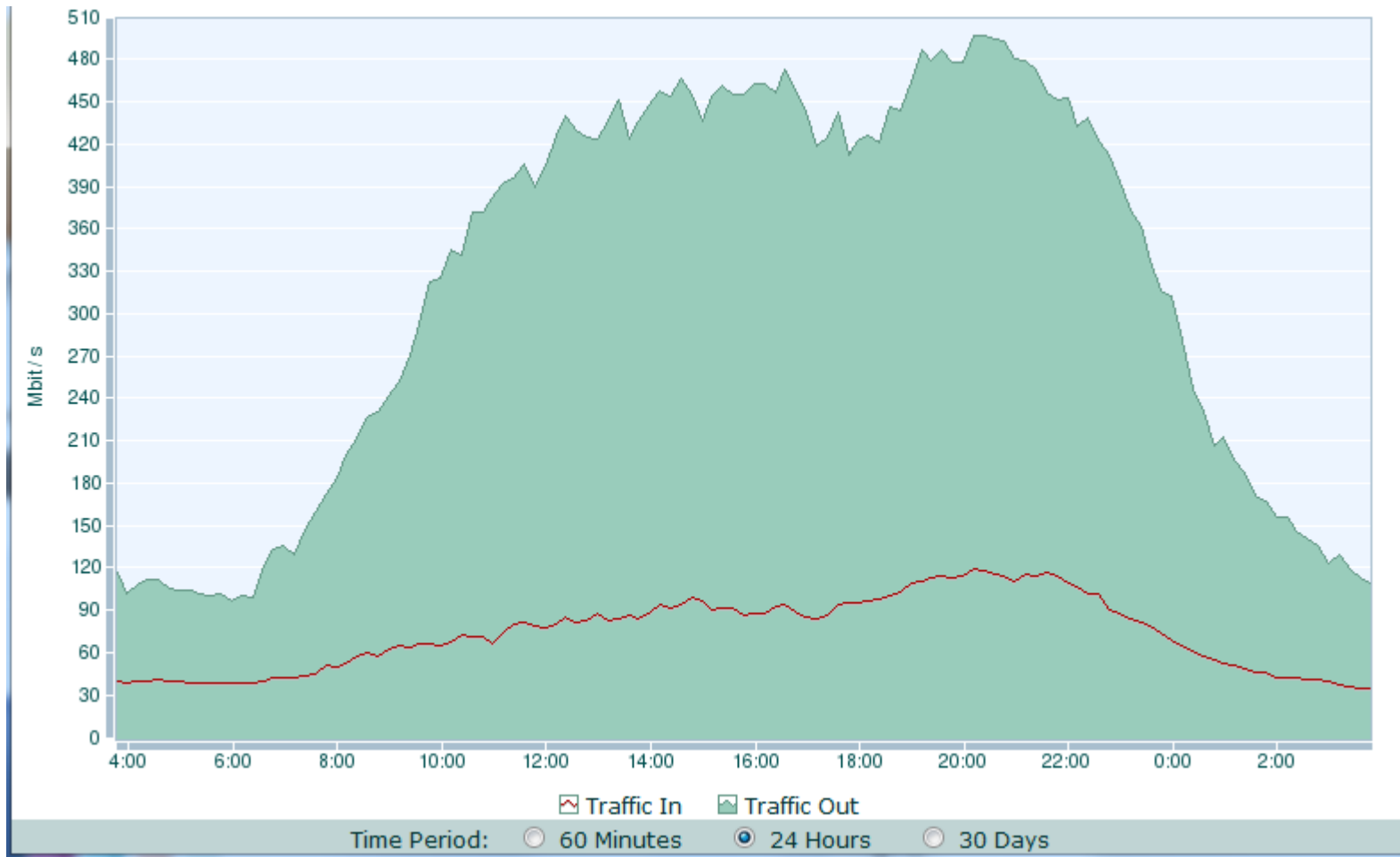
# Network Diagram



# Broadband Plan & Bandwidth

- ▶ Starting from 64Kbps
  - Now 10mMbps (Velocity Plans)
- ▶ Starting from 3GB Data cap
  - Now 5GB Data cap
- ▶ Student Package (Only ISP in Pacific)

# Bandwidth Utilization



# IPS – Intrusion Prevention System

- ▶ Monitoring
  - Automatic Signatures
  - Undetected Signatures
  - Manual Signatures

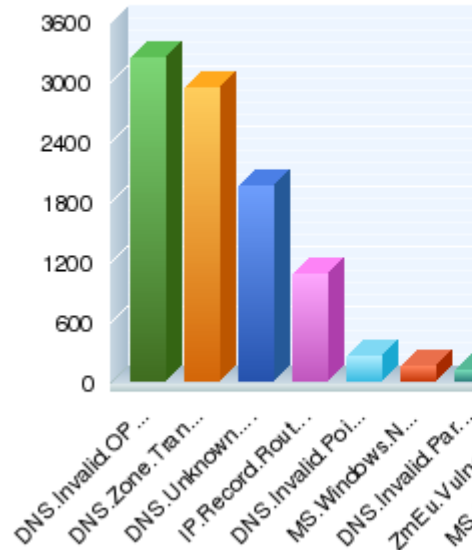
# Bandwidth issues

- ▶ Network exploits – Hacks
- ▶ Spamming – IRC botnets
- ▶ Low Bandwidth – Access network
- ▶ Latency – BGP traffic

# IPS Graph

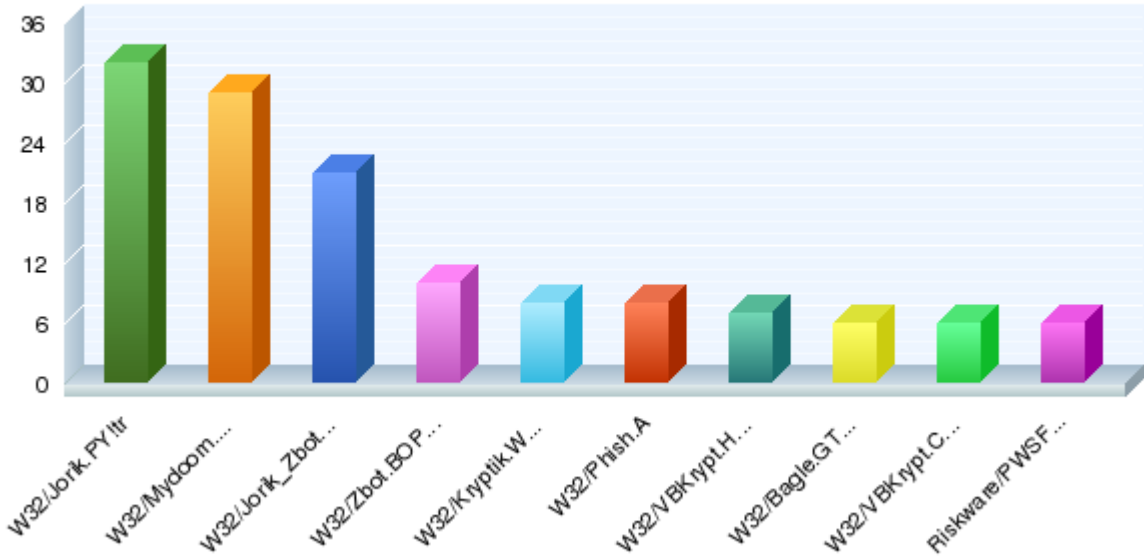
## Top Attacks

Top Attacks (all policies in all VDOMs) since 2012-06-11 00:43:44



## Top Viruses

Top Viruses (all policies in all VDOMs) since 2012-06-11 00:43:44



Top Attacks (all policies in all VDOMs)		
#	Attack Name	Last Detected
1	DNS.Invalid.OPcode	Mon Jul 2 04:03:44 2012
2	DNS.Zone.Transfer	Mon Jul 2 03:48:01 2012
3	DNS.Unknown.Class	Mon Jul 2 03:05:54 2012
4	IP.Record.Route.Option	Sun Jul 1 00:14:29 2012
5	DNS.Invalid.Pointer	Mon Jul 2 01:49:58 2012
6	MS.Windows.NAT.Helper.DNS.Query.DoS	Thu Jun 28 10:21:12 2012
7	DNS.Invalid.Parameter	Sun Jul 1 21:30:49 2012
8	ZmEu.Vulnerability.Scanner	Sun Jun 24 06:19:15 2012
9	MS.Outlook.GMT.Buffer.Overflow	Sun Jul 1 16:17:59 2012
10	DNS.Name.Overflow	Mon Jul 2 02:30:25 2012
11	MS.Exchange.Malformed.MIME.Header.Blank.Charset.DoS	Tue Jun 26 17:26:08 2012
12	PHP.CGI.Argument.Injection	Thu Jun 28 15:34:35 2012
13	MS.IIS.Web.Server.Unicode.Folder.Directory.Traversal	Thu Jun 28 03:04:13 2012
14	ISC.BIND.DNSSEC.Validation.DoS	Sat Jun 30 12:01:30 2012
15	MS.IIS.Web.Server.Folder.Traversal.Evasion	Thu Jun 28 02:58:05 2012
16	Symantec.Web.Gateway.Remote.LFI.Root.Exploit	Wed Jun 20 08:28:15 2012
17	DNS.Undersized.Message	Tue Jun 26 22:33:39 2012
18	RealVNC.Server.Authentication.Bypass	Wed Jun 27 04:48:35 2012
19	Tftpd32.DNS.Server.Buffer.Overflow	Tue Jun 12 17:32:45 2012

**Close**



# Types of Traffic's

- ▶ YouTube and Video Streaming
- ▶ Social Networking Sites
- ▶ Peer to Peer
- ▶ Spamming

# Types of Traffic's

- ▶ YouTube and Video Streaming
- ▶ Social Networking Sites
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▶ **Exit ();**

▶ `/*program terminated*/`