

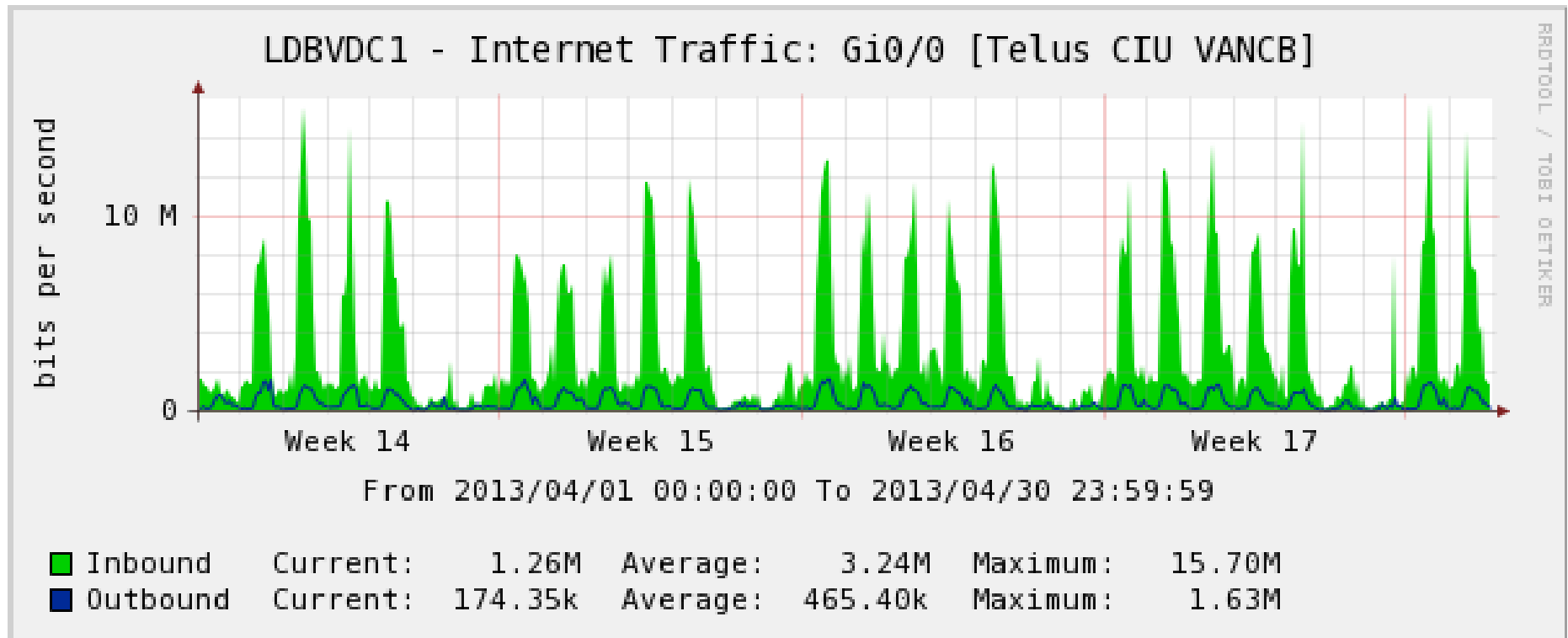
Data Centre Chart Analysis

April 2013



Monthly Vancouver, Head Office Internet Gateway- April 2013

For Webstore, Vendor Facing Website, WEB Browsing and other external business communications



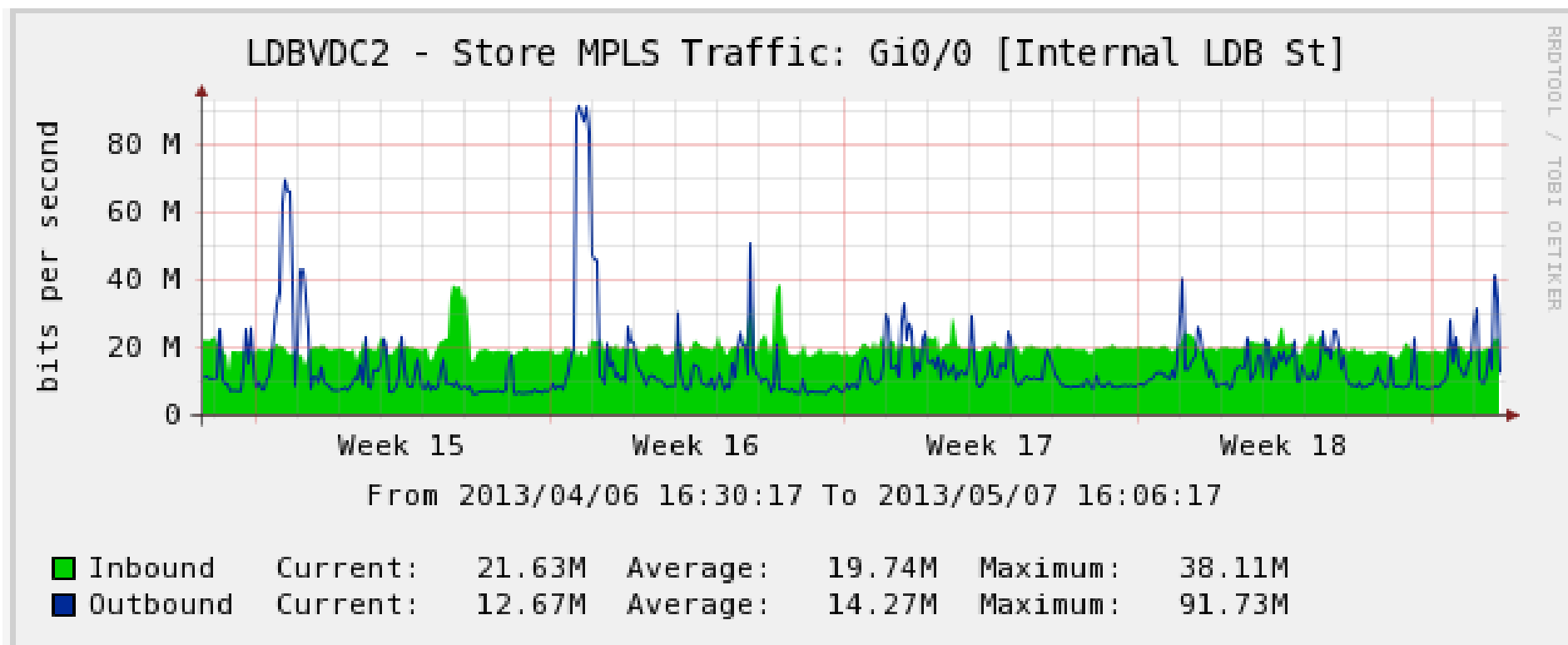
Summary: Graphical view of Head Office Internet data communications. The maximum capacity is 20Mbps.

Observation: During HO core hours (8:00 to 4:30), Internet Gateway operating as expected- 6Mbps download and 1Mbps upload average.

Recommendation: Not applicable

Monthly Vancouver, Head Office Private Network Gateway – April 2013

For Stores Electronic Notifications, Price Changes, EOD Sales Data and Communications between Vancouver & Kamloops Data Centres



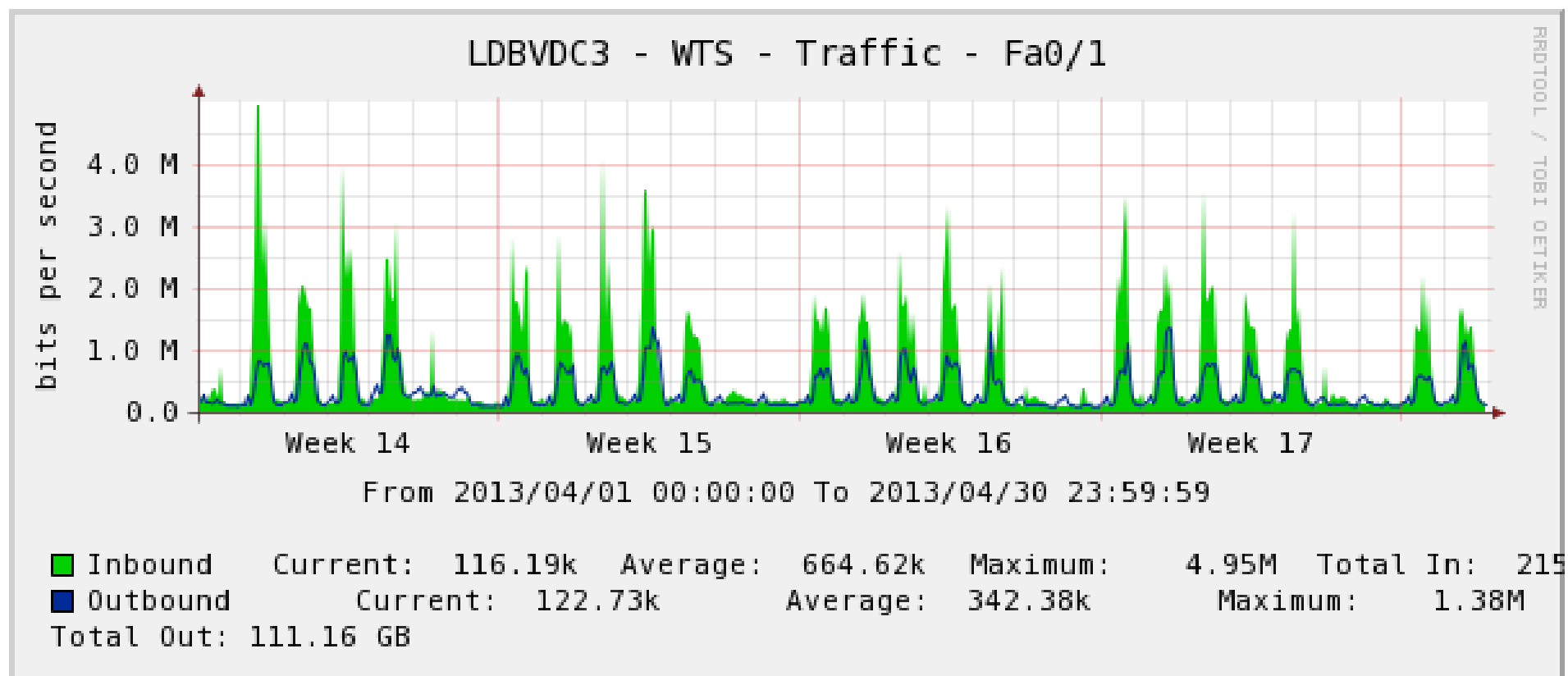
Summary: Graphical view of Head Office, Kamloops Distribution and Stores data communications. The maximum capacity is 100 Mbps.

Observation: During HO core hours (8:00 to 4:30), Private Network Internet Gateway operating as expected.

Recommendation: Not applicable

Monthly Vancouver, Head Office to Provincial Government Network Gateway – April 2013

For Corporate and Stores Email and Government websites communications



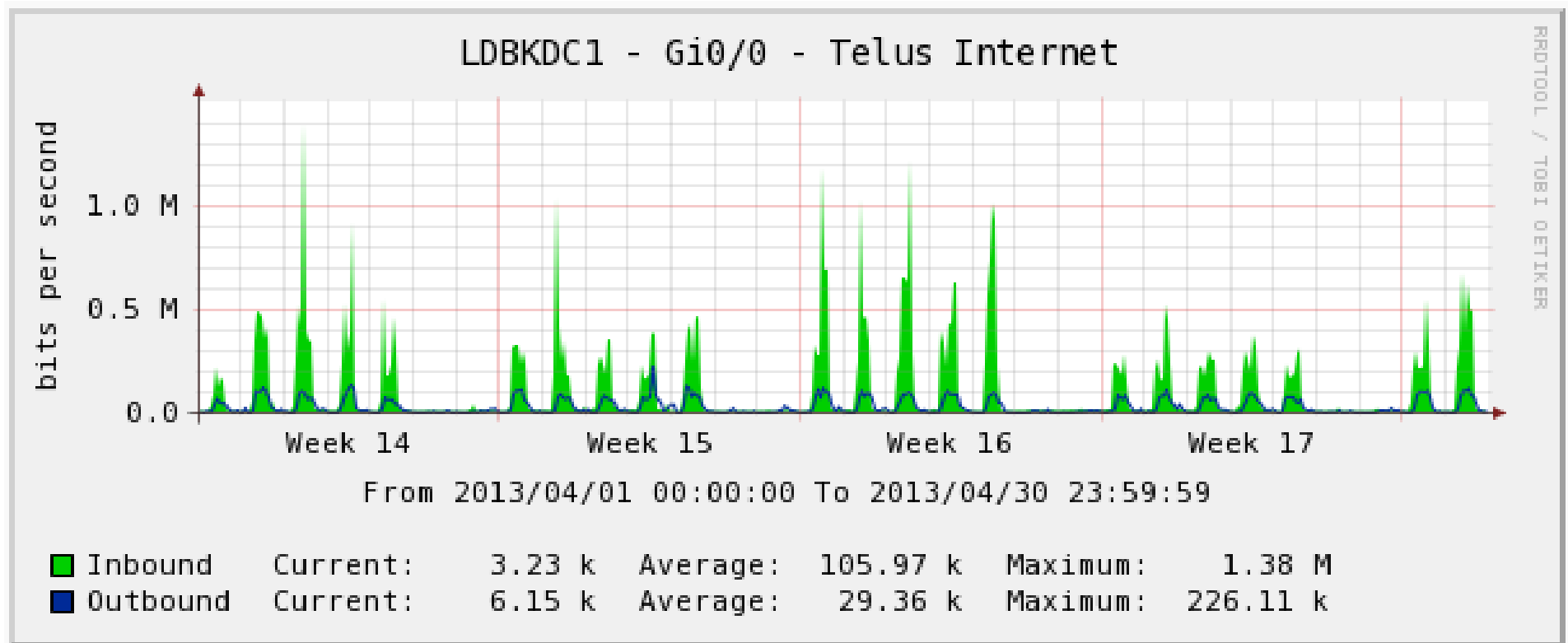
Summary: Graphical view of Head Office and Provincial government data communications. The maximum capacity is 10 Mbps.

Observation: Network utilization of the service above is deemed working within normal parameters.

Recommendation: Not applicable

Monthly Kamloops, Distribution Internet Gateway- April 2013

For WEB Browsing and other external business communications



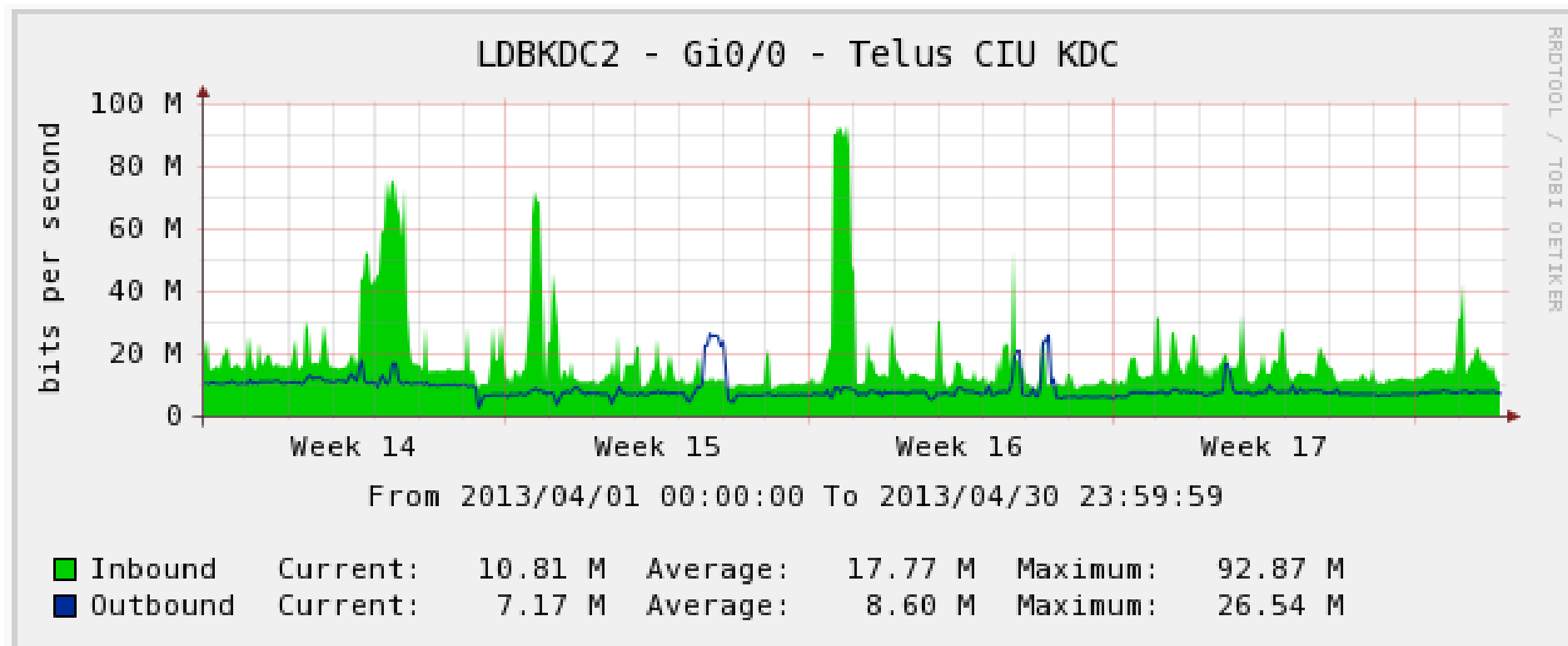
Summary: Graphical view of Kamloops Distribution Internet data communications. The maximum capacity is 10Mbps.

Observation: Minimal use. Can be leveraged for internet facing business requirements such as Lottery transactions

Recommendation: Not applicable

Monthly Kamloops, Distribution Private Network Gateway – April 2013

For Vancouver & Kamloops Data Centres communications and Store remote management



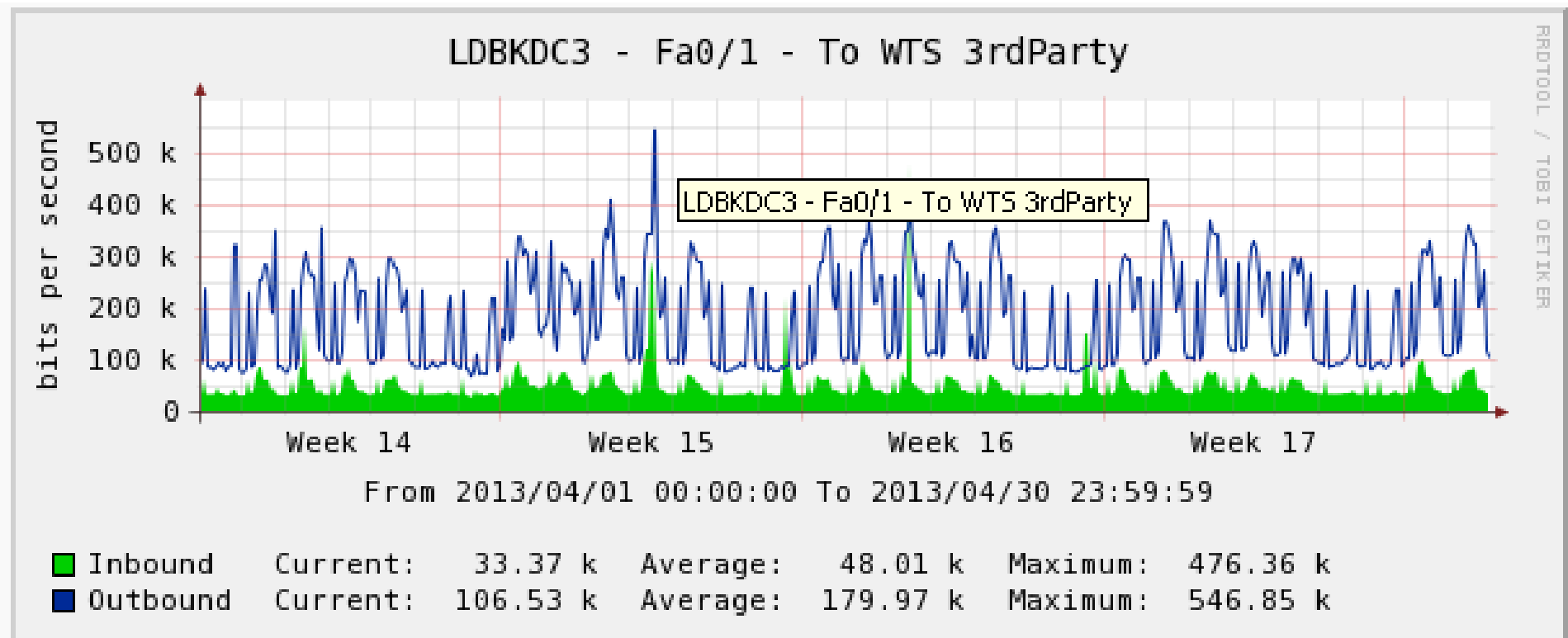
Summary: Graphical view of Head Office, Kamloops Distribution and Stores data communications. The maximum capacity is 100 Mbps.

Observation: Network utilization of the service above is deemed working within normal parameters.

Recommendation: Not applicable

Monthly Kamloops, Distribution to Provincial Government Network Gateway – April 2013

For Corporate and Stores Email and Government websites communications

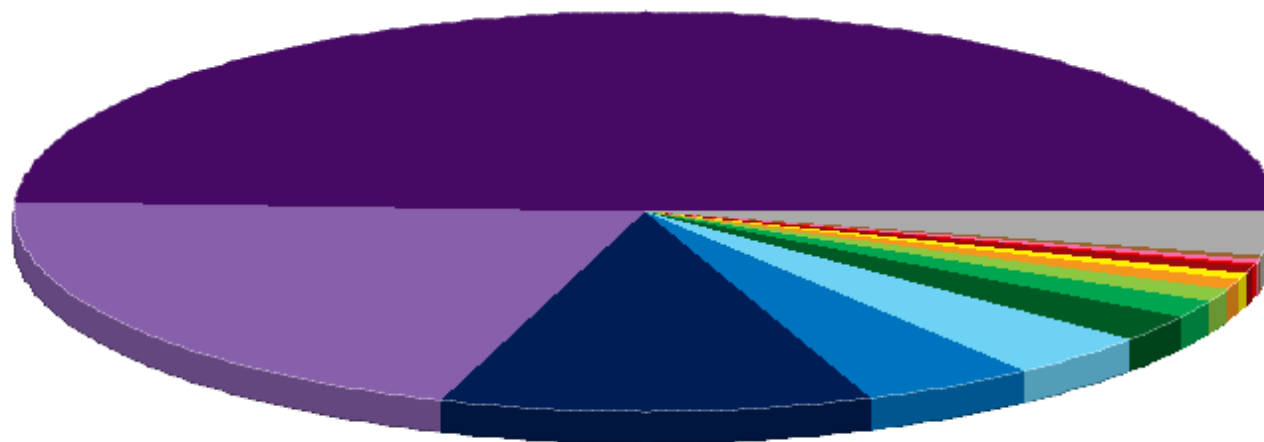


Summary: Graphical view of Kamloops, Distribution and Provincial government data communications. The maximum capacity is 10 Mbps.

Observation: Minimal use

Recommendation: Not applicable

VDC WAN Optimized Traffic Summary - April 2013



Period: Last Month Type: Optimized Traffic: Bi-Directional Refresh: Off Go

	Port	Reduction	LAN Data	WAN Data	Traffic %
	Total Optimized Traffic	<div><div></div></div> (68.36%)	8698.7 GB	2752.4 GB	--
	1521 (ncube-lm)	<div><div></div></div> (81.38%)	4299.6 GB	800.7 GB	49.43%
	902 (ideafarm-door)	<div><div></div></div> (84.57%)	1806.6 GB	278.8 GB	20.77%
	9002 (dynamid)	<div><div></div></div> (0.00%)	983.3 GB	997.4 GB	11.30%
	1522 (ricardo-lm)	<div><div></div></div> (74.33%)	395.7 GB	101.6 GB	4.55%
	8779 (SMB2)	<div><div></div></div> (83.55%)	315.2 GB	51.9 GB	3.62%
	18184 (opsec-lea)	<div><div></div></div> (0.00%)	211.2 GB	216.9 GB	2.43%
	1433 (SQL:TDS)	<div><div></div></div> (69.09%)	133.7 GB	41.3 GB	1.54%
	445 (CIFS:TCP)	<div><div></div></div> (74.03%)	100.9 GB	26.2 GB	1.16%
	7777 (cbt)	<div><div></div></div> (93.36%)	83.1 GB	5647.3 MB	0.95%

Data Reduction

Average: 68.4%
Peak: 94.8%
3.2x capacity increase

LAN Throughput

Total: 9.3 TB

WAN Throughput

Total: 3.0 TB

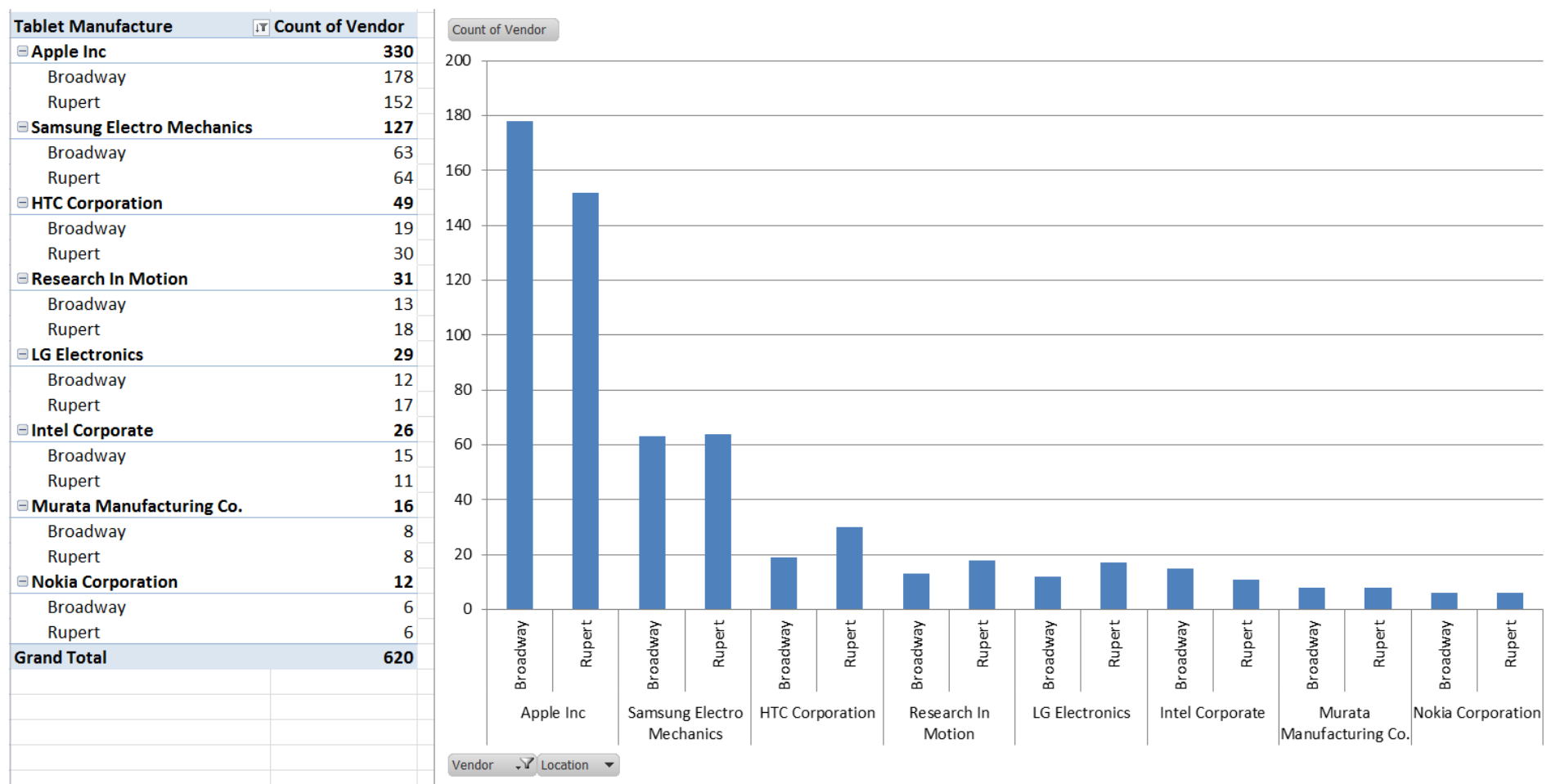
6.4 TB was removed
from the WAN link.

Summary: Optimized WAN traffic from VDC to KDC showing reduction in WAN traffic.

Observation: Total traffic was optimized by 68.36% resulting in a traffic decrease of 6 TB

Recommendation: Not applicable

Branch Public WiFi Access, no authentication required – April 2013



Summary:

High level graphical view of top 8 vendors using the Public Wireless Network for the month of April 2013.

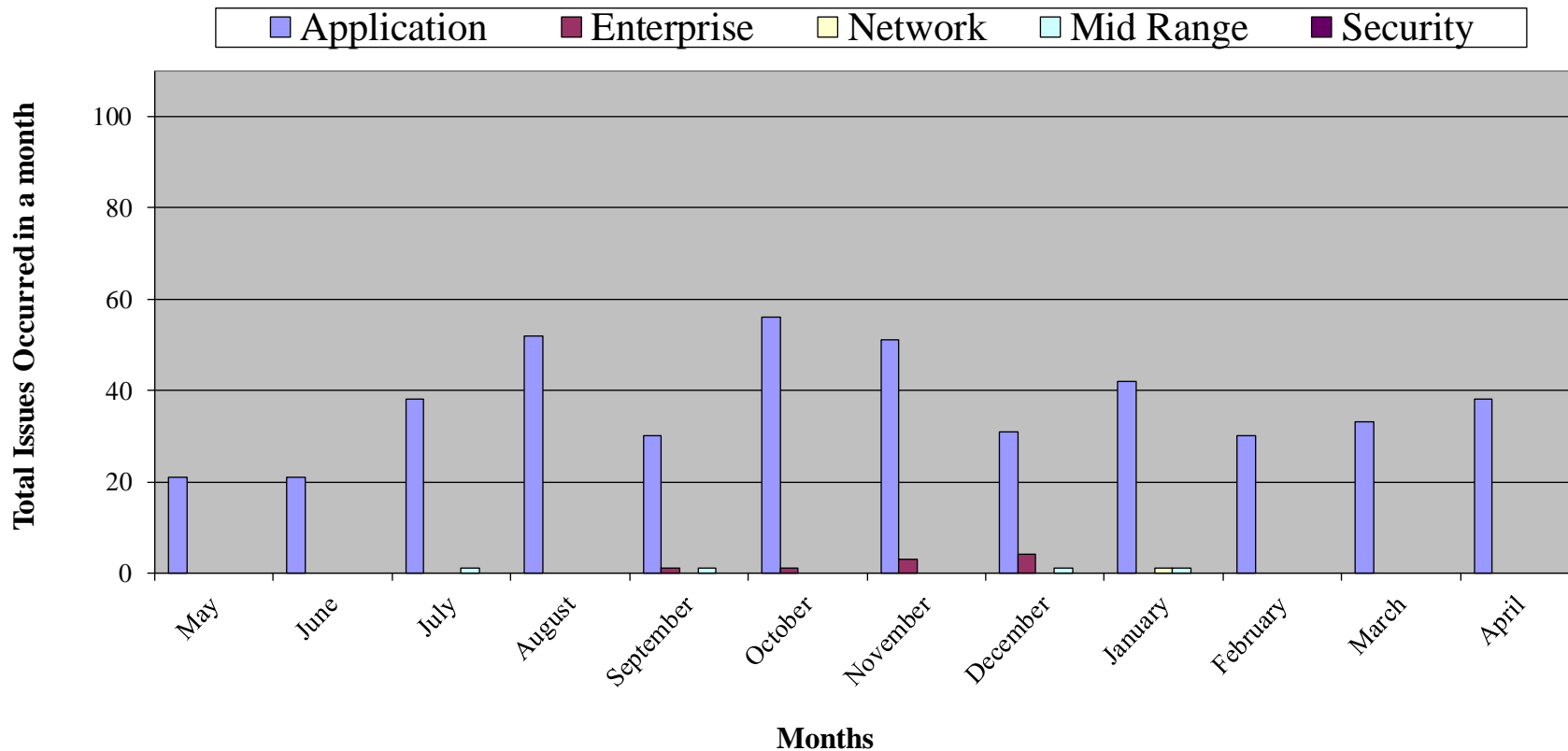
Observation:

Please note some devices (Apple) automatically connect to visible Wi-Fi spots, but it does not necessarily reflect usage (they may not have agreed to the terms and actively use the hotspot).

Recommendation:

Not applicable

Operational Production Issues 2013



Summary:

High level graphical view of monthly production issues from January – April 2013. Input comes from Operations daily status report.

Observation:

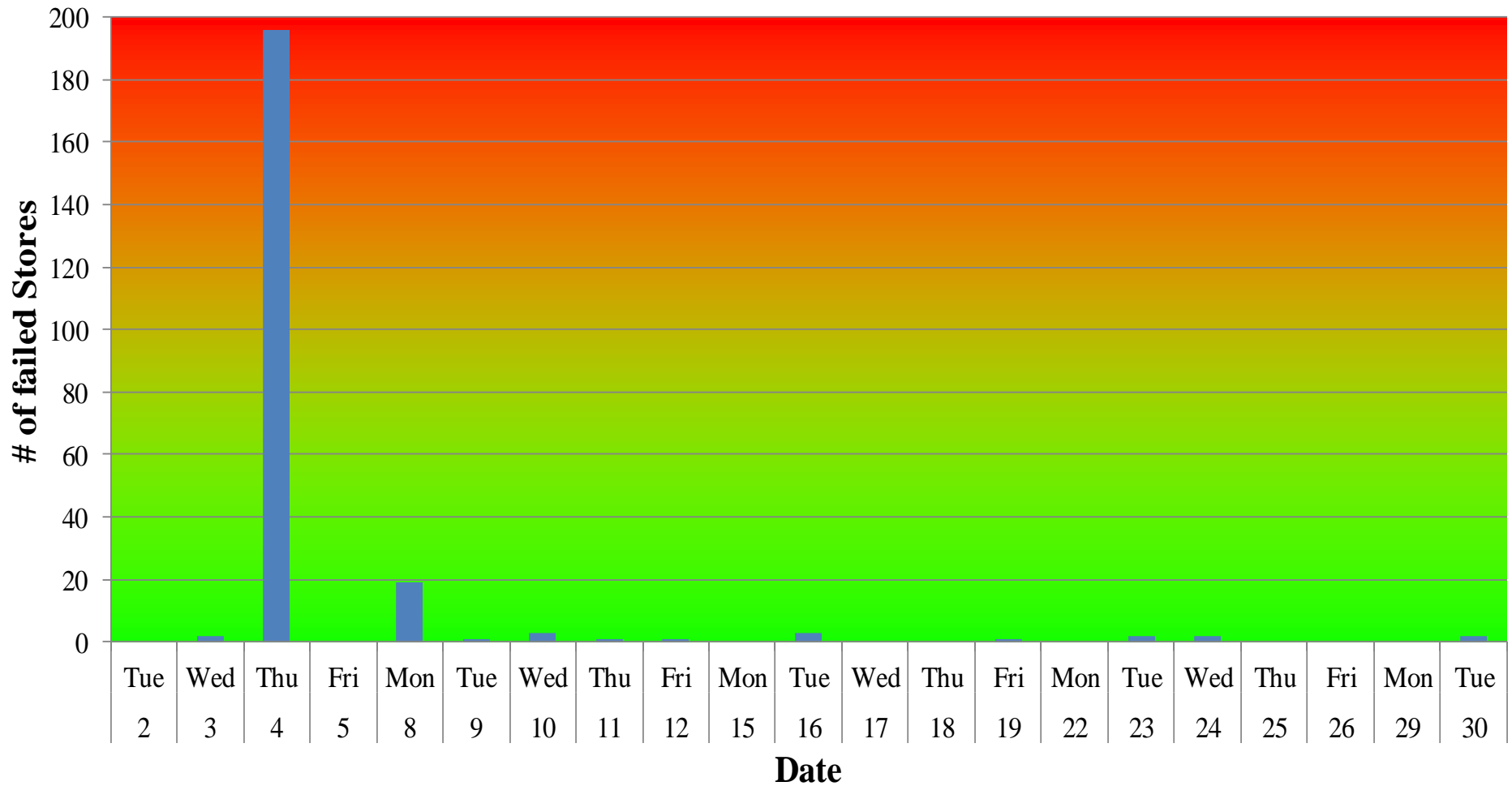
Majority are application issues of which 45% are Autosys jobs and 75% are run away process (see BMC tickets for more information) for the month of April.

Recommendation:

Not applicable

Sales – Finance Data Availability - April 2013

BCLS Sales in DW

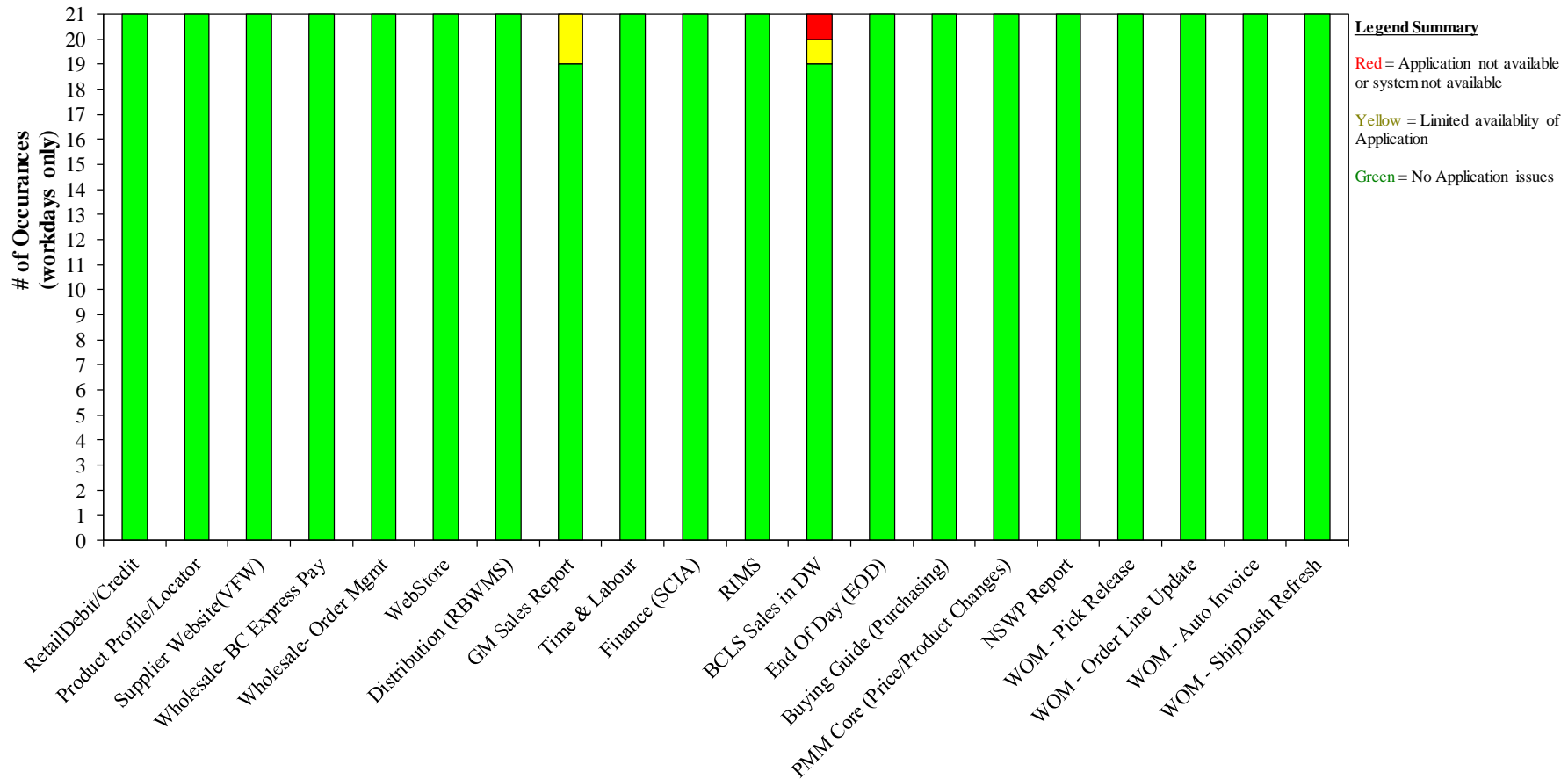


Summary: Graphical view of transmitted BCLS Stores Financial Sales Data to Head Office in Data Warehouse.

Observation: There were two instances where BCLS Sales didn't report to Data Warehouse. Please refer to BMC # 528646 and 531288 for further details.

Recommendation: Not applicable

Daily (7:00am Snapshot) Availability of Business Application – April 2013



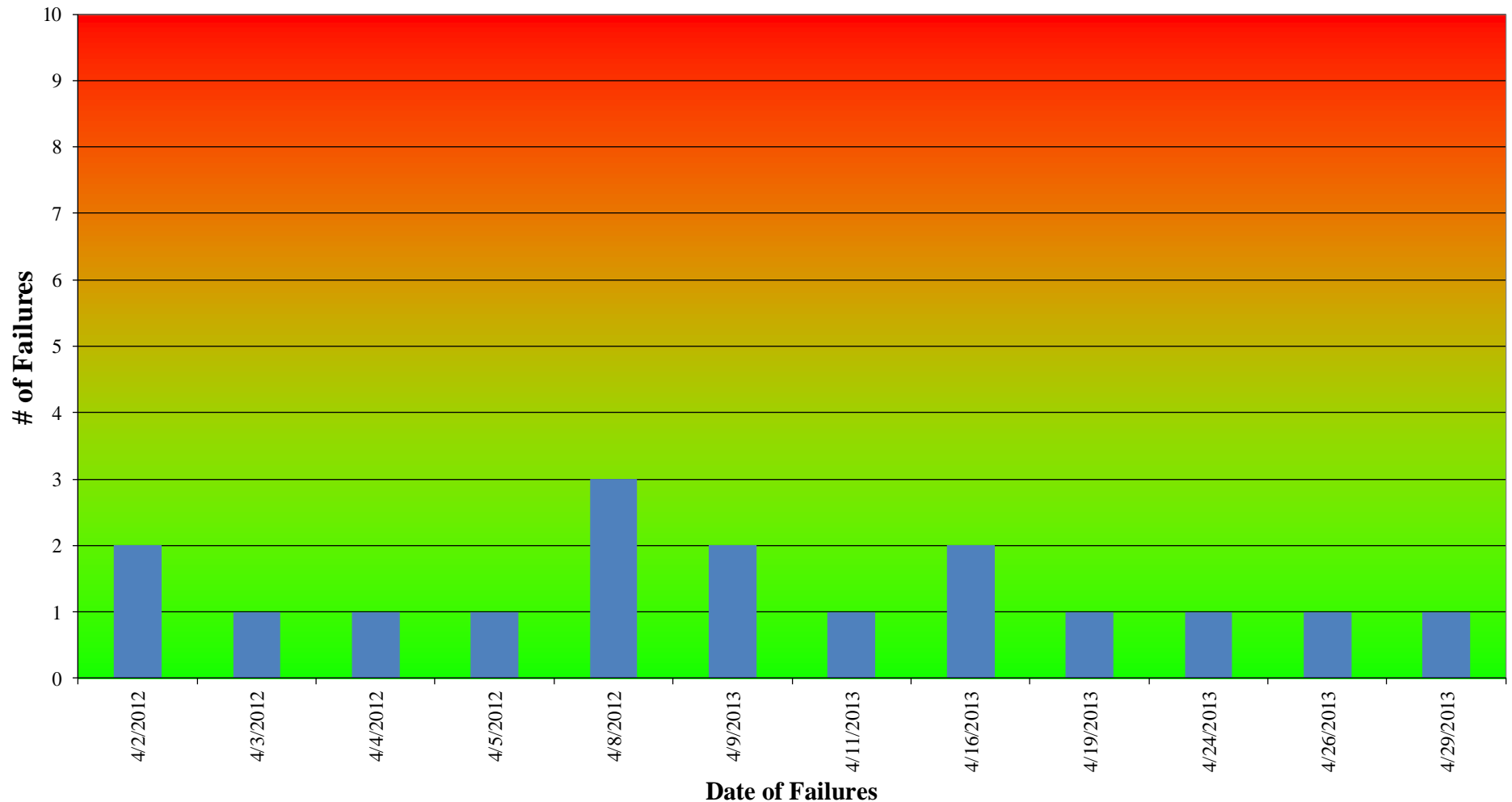
Key Applications

Summary: High level graphical view of Business Applications availability.

Observation: In April there was only one critical issue: BCLS Sales in DW. Please refer to BMC # 528646 for further details.

Recommendation: Not applicable

Autosys Jobs failed per day – April 2013

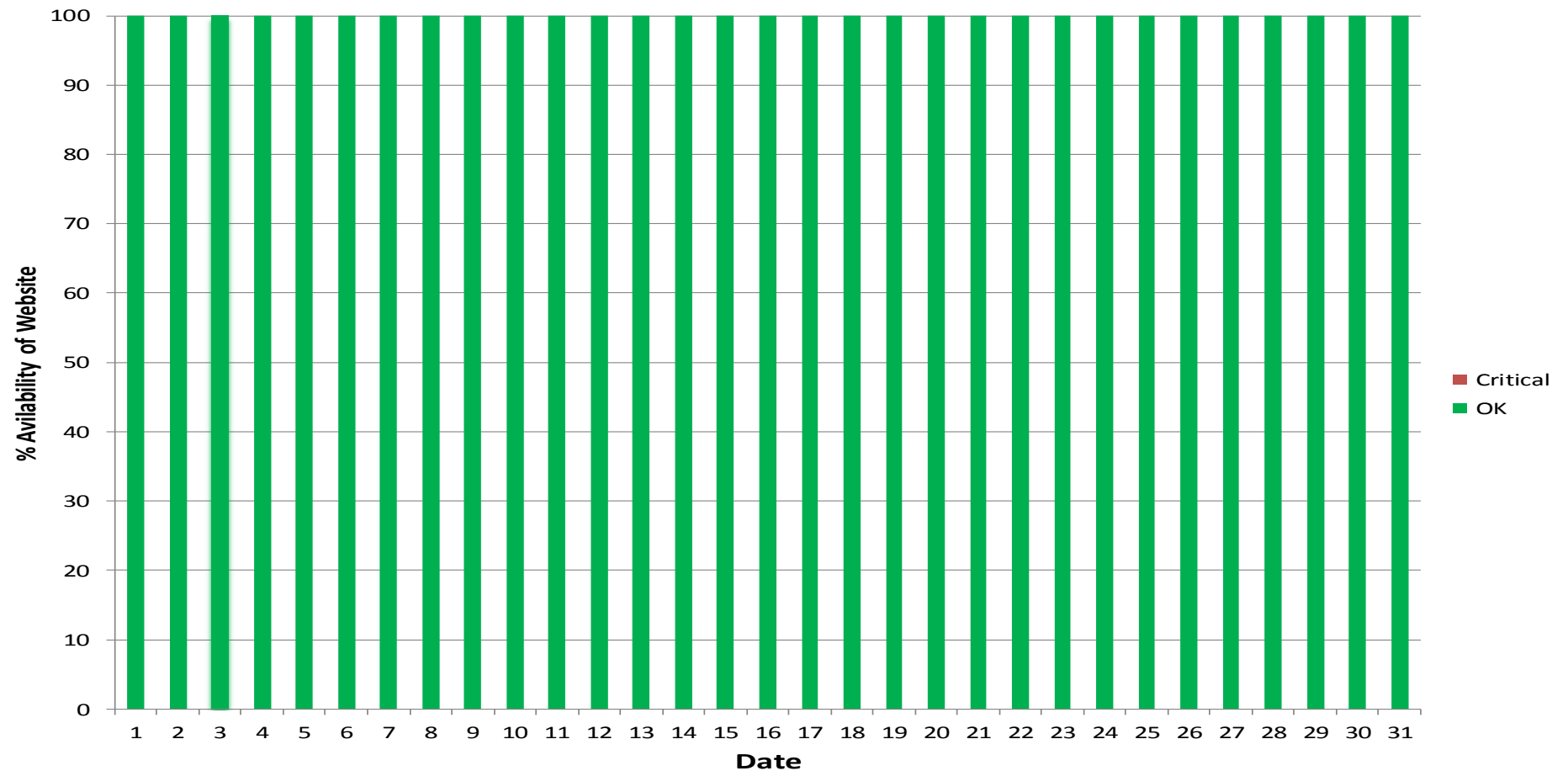


Summary: High level graphical view of Production Autosys Job failures for the month of April 2013.

Observation: On April 08 there were several Autosys job failures due to Olympus server having an issue. Please refer to 531256 and 531262 for further details.

Recommendation: Not applicable

WebStore Availability April 2013

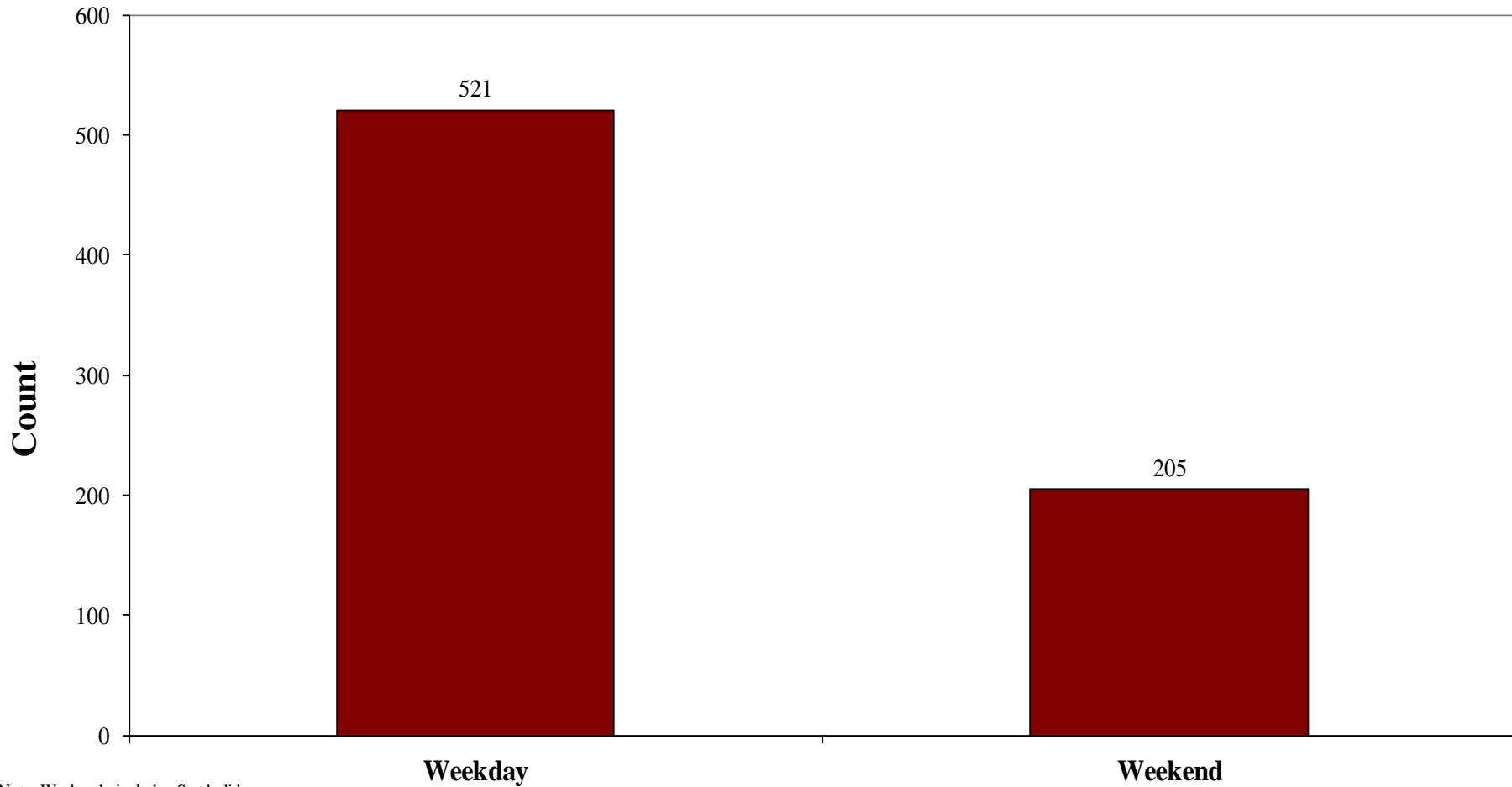


Summary: High level graphical view of Webstore's Availability for the month of April 2013.

Observation: There were no significant issues in the month of April in terms of WebStore

Recommendation: Not applicable

Remote Access on Weekday vs. Weekend – April 2013



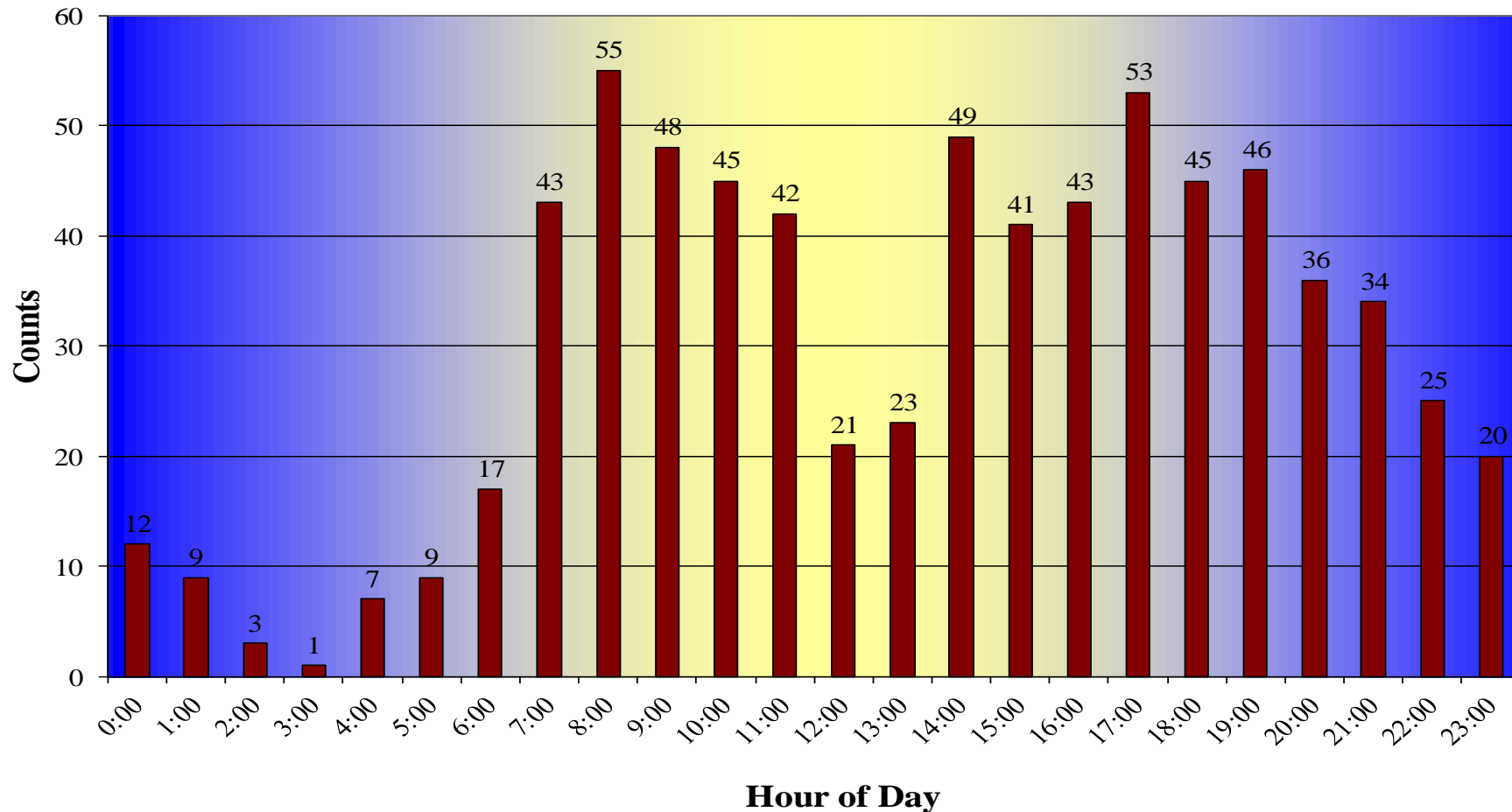
* Note: Weekends includes Stat holidays

Summary: High level weekday and weekend graphical view of Users remotely accessing Head Office resources.

Observation: More people accessing Head Office resources during the Weekday versus Weekend in the month of April.

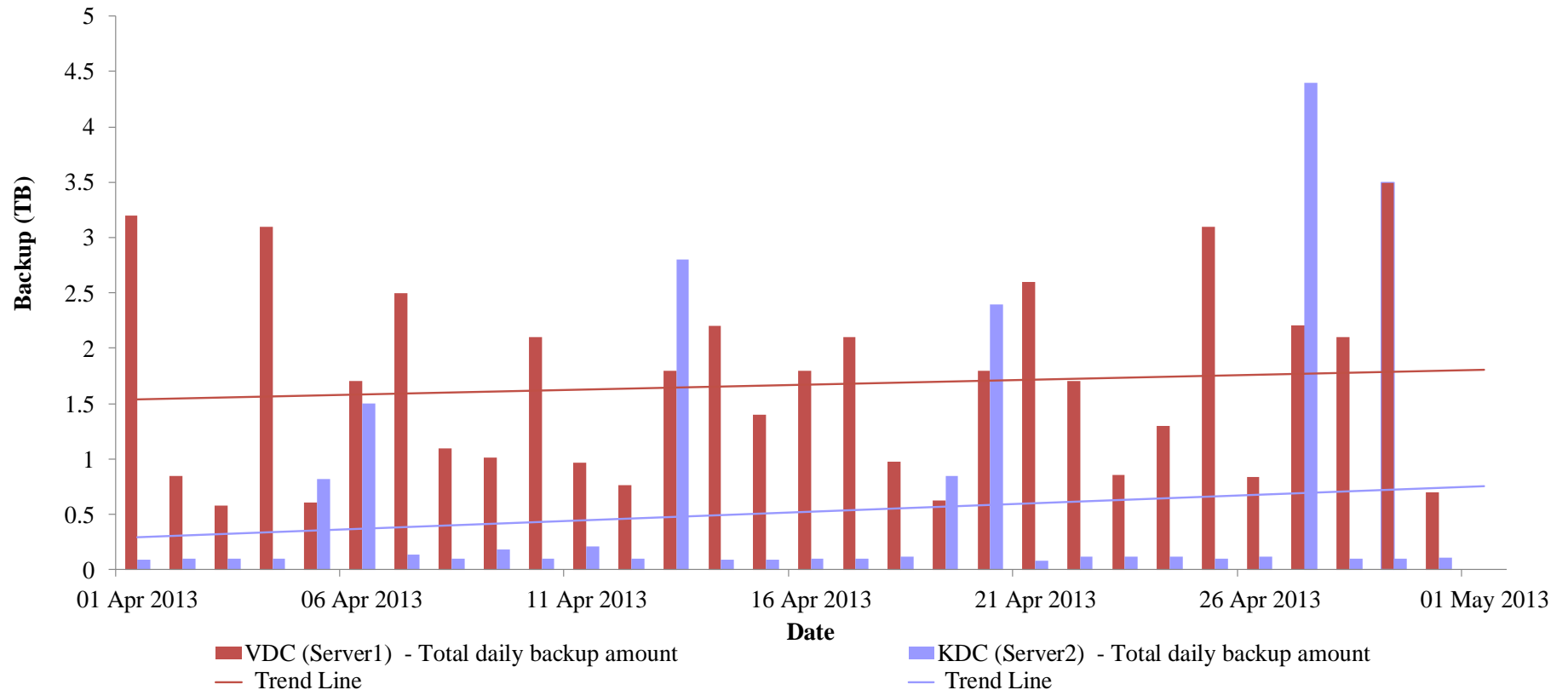
Recommendation: Not applicable

Remote Access by Hour of Day – April 2013



- Summary:** High level graphical view of Users remotely accessing Head Office resources shown in hours of the day for the month of April.
- Observation:** More people accessing Head Office resources in the early afternoon (2pm – 7pm) versus in the morning (between 7am – 10am).
- Recommendation:** Not applicable

Total Daily Backup Amount (TB) – April 2013



Summary:

High level graphical view graphical view of TSM Daily Backup for the month of April.

Note: Each LTO4 tape holds 1.6TB. The VDC library has 253 tape slots and KDC library has 125 tape slots. The capacity is limited by the number of slots we can put as scratch tapes. However the Vault capacity is infinite as we continue to order tapes as required.

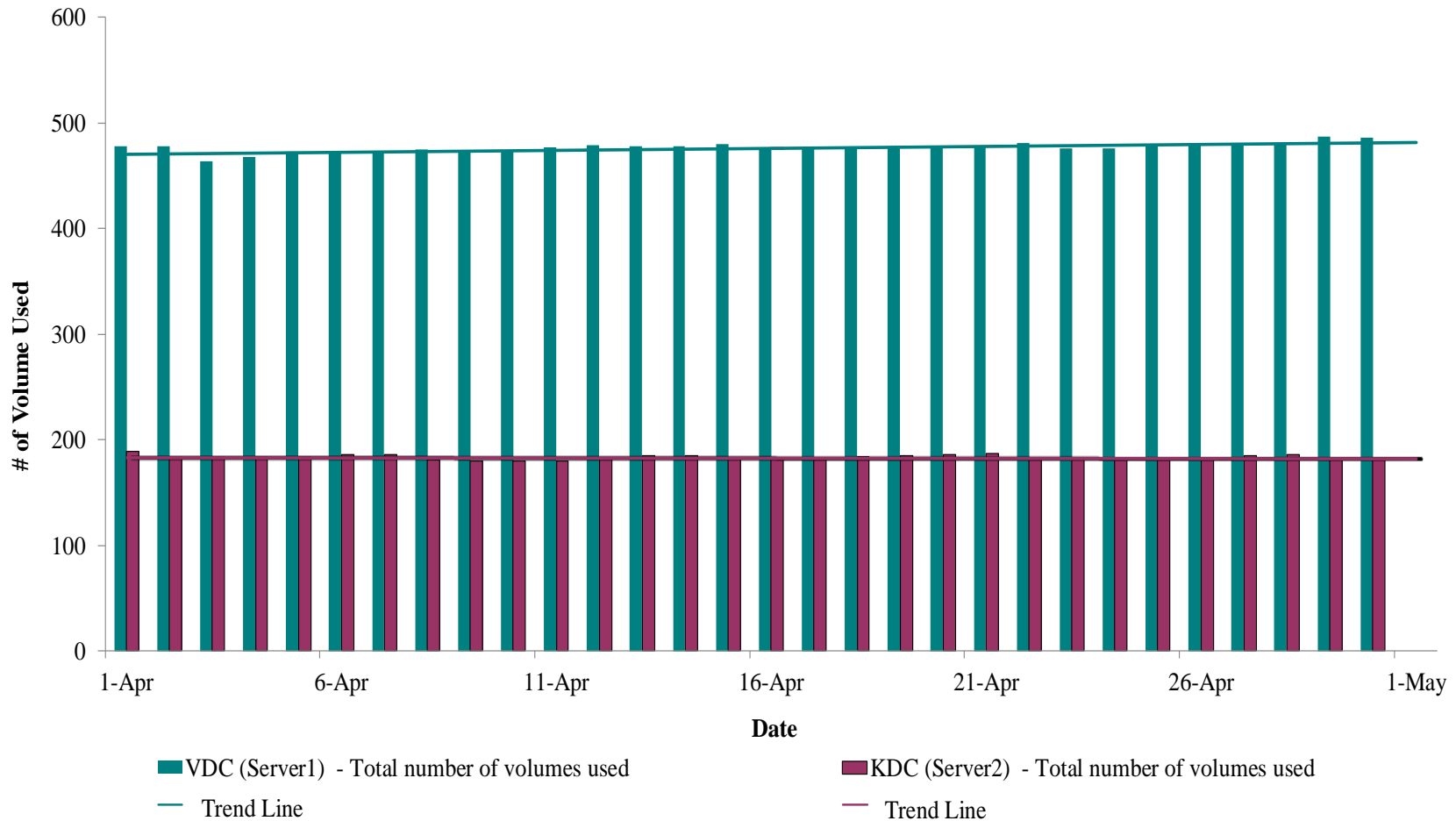
Observation:

On April 27th – Both KDC and VDC had over 6.7TB of SAN storage data backed up by TSM on to tape.

Recommendation:

Not applicable

Total Number of Volumes Used – April 2013

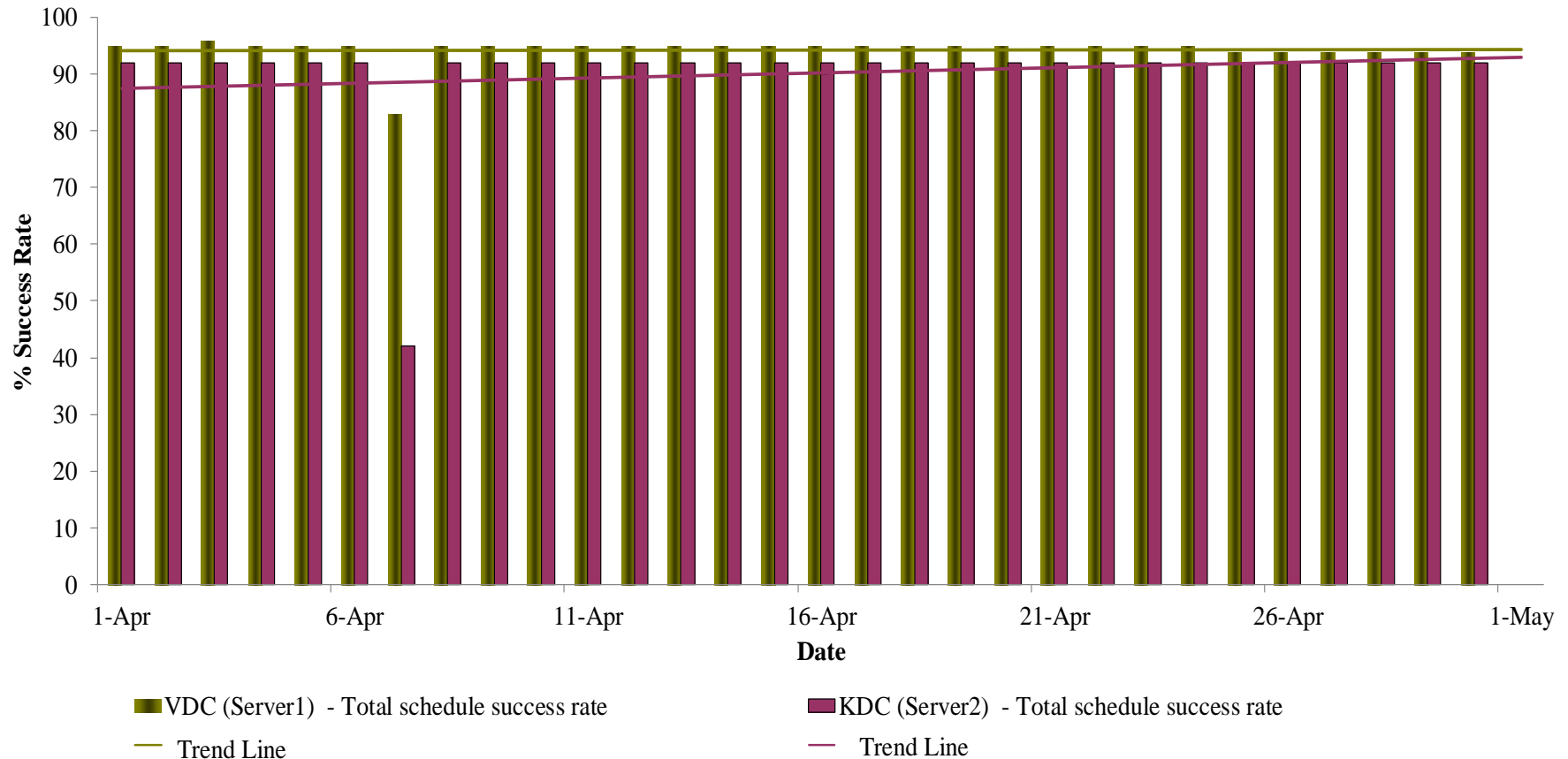


Summary: High level graphical view of TSM using the number of volumes in a day for the month of April.

Observation: The VDC library has 253 tape slots and 225 of them are in use. The KDC library has 125 tape slots and 123 of them are in use. This also includes Tapes that off site at Iron Mountain

Recommendation: Not applicable

Total Schedule Success Rate – April 2013

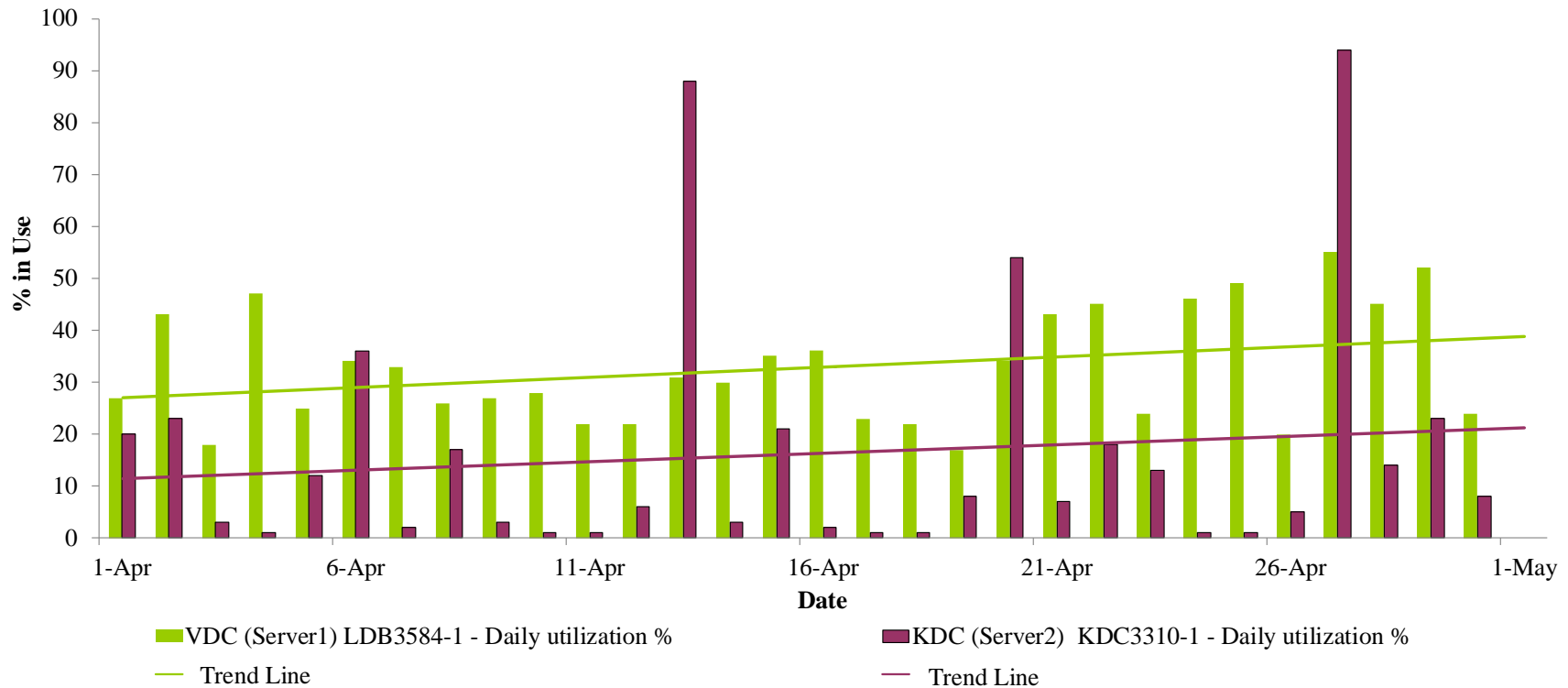


Summary: High level graphical view of TSM being successful in completing the backups on a daily basis for the month of April.

Observation: Continuing to work on the known client failures that are having problems. On April 07 – there was firewall outage for upgrade in KDC and installation of Riverbed WAN Accelerators in VDC

Recommendation: Not applicable

Daily TSM Utilization (%) – April 2013



Summary: High level graphical view of TSM Tapes being mounted each day for the month of April.

Observation: TSM is highly utilized on the weekends. Three times KDC was more utilized versus TSM for VDC.

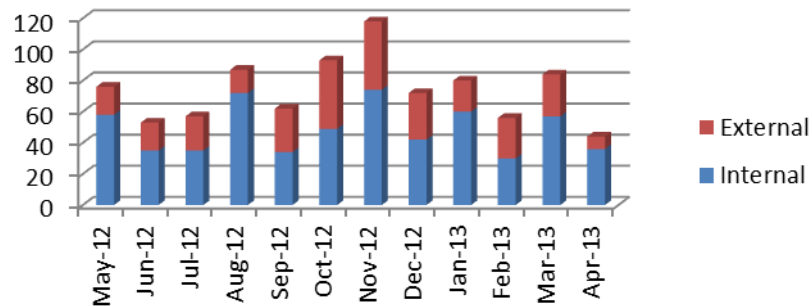
Recommendation: Not applicable

Network Service Statistics

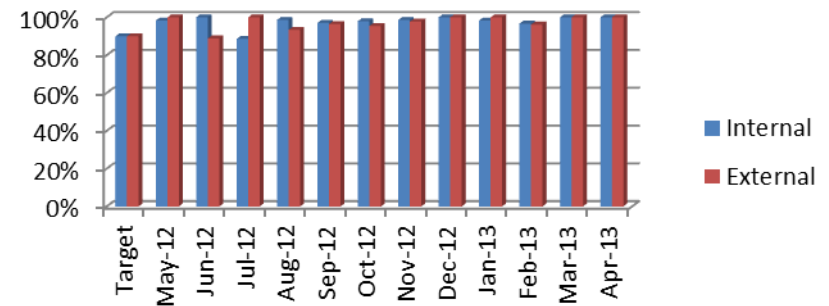
Summary

Totals	Target	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
Tickets closed		76	53	57	87	62	93	118	72	80	56	84	44
Completed on time		75	51	53	85	60	90	116	72	79	54	84	44
% Completed on time	90%	99%	96%	93%	98%	97%	97%	98%	100%	99%	96%	100%	100%
Internal													
Tickets closed		58	35	35	72	34	49	74	42	60	30	57	36
Completed on time		57	35	31	71	33	48	73	42	59	29	57	36
% Completed on time	90%	98%	100%	89%	99%	97%	98%	99%	100%	98%	97%	100%	100%
External (SSBC service)													
Tickets closed		18	18	22	15	28	44	44	30	20	26	27	8
Completed on time		18	16	22	14	27	42	43	30	20	25	27	8
% Completed on time	90%	100%	89%	100%	93%	96%	95%	98%	100%	100%	96%	100%	100%

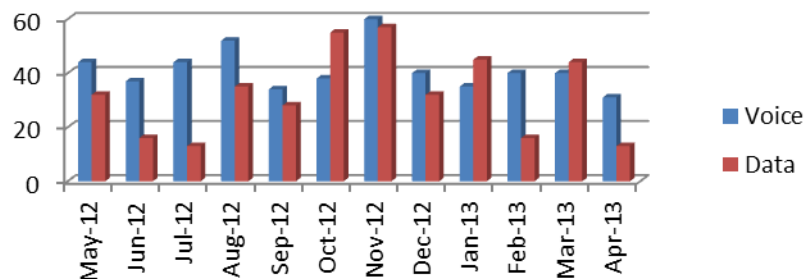
Tickets Closed



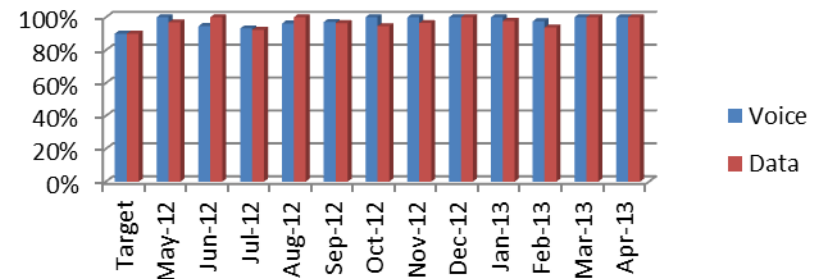
% Completed on Time



Tickets Closed by Type



% Completed on Time



Network Service Statistics Summary

Voice	Target	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
Tickets closed		44	37	44	52	34	38	61	40	35	40	40	31
Completed on time		44	35	41	50	33	38	61	40	35	39	40	31
% Completed on time	90%	100%	95%	93%	96%	97%	100%	100%	100%	100%	98%	100%	100%
Internal													
Tickets closed		27	19	25	42	11	12	35	20	21	19	16	26
Completed on time		27	19	22	41	11	12	35	20	21	19	16	26
% Completed on time	90%	100%	100%	88%	98%	100%	100%	100%	100%	100%	100%	100%	100%
External (SSBC service)													
Tickets closed		17	18	19	10	23	26	26	20	14	21	24	5
Completed on time		17	16	19	9	22	26	26	20	14	20	24	5
% Completed on time	90%	100%	89%	100%	90%	96%	100%	100%	100%	100%	95%	100%	100%

Data	Target	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
Tickets closed		32	16	13	35	28	55	57	32	45	16	44	13
Completed on time		31	16	12	35	27	52	55	32	44	15	44	13
% Completed on time	90%	97%	100%	92%	100%	96%	95%	96%	100%	98%	94%	100%	100%
Internal													
Tickets closed		31	16	10	30	23	37	39	22	39	11	41	10
Completed on time		30	16	9	30	22	36	38	22	38	10	41	10
% Completed on time	90%	97%	100%	90%	100%	96%	97%	97%	100%	97%	91%	100%	100%
External (SSBC service)													
Tickets closed		1	0	3	5	5	18	18	10	6	5	3	3
Completed on time		1	0	3	5	5	16	17	10	6	5	3	3
% Completed on time	90%	100%	100%	100%	100%	100%	89%	94%	100%	100%	100%	100%	100%

Network Service Statistics

Head Office Details

HO Voice	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
Tickets closed	35	28	36	48	20	29	48	30	22	31	32	27
Completed on time	35	26	33	46	20	29	48	30	22	31	32	27
% Completed on time	100%	93%	92%	96%	100%	100%	100%	100%	100%	100%	100%	100%
Internal												
Tickets closed	21	14	18	38	10	11	26	14	12	16	10	24
Completed on time	21	14	15	37	10	11	26	14	12	16	10	24
% Completed on time	100%	100%	83%	97%	100%	100%	100%	100%	100%	100%	100%	100%
External (SSBC service)												
Tickets closed	14	14	18	10	10	18	22	16	10	15	22	3
Completed on time	14	12	18	9	10	18	22	16	10	15	22	3
% Completed on time	100%	86%	100%	90%	100%	100%	100%	100%	100%	100%	100%	100%

HO Data	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
Tickets closed	8	6	11	16	14	16	15	13	18	6	18	10
Completed on time	8	6	10	16	13	16	15	13	18	5	18	10
% Completed on time	100%	100%	91%	100%	93%	100%	100%	100%	100%	83%	100%	100%
Internal												
Tickets closed	8	6	9	14	13	16	12	9	17	6	17	8
Completed on time	8	6	8	14	12	16	12	9	17	5	17	8
% Completed on time	100%	100%	89%	100%	92%	100%	100%	100%	100%	83%	100%	100%
External (SSBC service)												
Tickets closed	0	0	2	2	1	0	3	4	1	0	1	2
Completed on time	0	0	2	2	1	0	3	4	1	0	1	2
% Completed on time	0%	0%	100%	100%	100%	0%	100%	100%	100%	0%	100%	100%

Network Service Statistics

Store Details

Branch Voice	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
Tickets closed	9	9	8	4	14	9	13	10	13	9	8	4
Completed on time	9	9	8	4	13	9	13	10	13	8	8	4
% Completed on time	100%	100%	100%	100%	93%	100%	100%	100%	100%	89%	100%	100%
Internal												
Tickets closed	6	5	7	4	1	1	9	6	9	3	6	2
Completed on time	6	5	7	4	1	1	9	6	9	3	6	2
% Completed on time	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
External (SSBC service)												
Tickets closed	3	4	1	0	13	8	4	4	4	6	2	2
Completed on time	3	4	1	0	12	8	4	4	4	5	2	2
% Completed on time	100%	100%	100%	0%	92%	100%	100%	100%	100%	83%	100%	100%

Branch Data	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
Tickets closed	24	10	2	19	14	39	42	19	27	10	26	3
Completed on time	23	10	2	19	14	36	40	19	26	10	26	3
% Completed on time	96%	100%	100%	100%	100%	92%	95%	100%	96%	100%	100%	100%
Internal												
Tickets closed	23	10	1	16	10	21	27	13	22	5	24	2
Completed on time	22	10	1	16	10	20	26	13	21	5	24	2
% Completed on time	96%	100%	100%	100%	100%	95%	96%	100%	95%	100%	100%	100%
External (SSBC service)												
Tickets closed	1	0	1	3	4	18	15	6	5	5	2	1
Completed on time	1	0	1	3	4	16	14	6	5	5	2	1
% Completed on time	100%	0%	100%	100%	100%	89%	93%	100%	100%	100%	100%	100%

Network Service Statistics

Response Date	Due	Incident	Location	Category	Reason for late Completion
29-May-12	30-Apr-12	478293	Store	Data	Post reno punchdown was scheduled for May 19 there was some confusion over what the Telus tech was supposed to do so he was redispached
07-Jun-12	16-May-12	479253	Head Office	Voice	New Polycom had to be purchased
18-Jun-12	11-Jun-12	484866	Head Office	Voice	Delay in software change request with SSBC
09-Jul-12	29-Jun-12	488930	Head Office	Voice	Static issue on phone lines.
12-Jul-12	05-Jun-12	484285	Head Office	Voice	Static issue on phone lines.
12-Jul-12	04-Jul-12	489536	Head Office	Voice	Delay in getting access to first aid room.
16-Jul-12	30-May-12	483316	Head Office	Data	Delay in getting approval for changes
01-Aug-12	27-Jul-12	488880	Store	Voice	Delay in getting phone line installed
10-Aug-12	07-Aug-12	495846	Head Office	Voice	Static issue on phone lines.
23-Aug-12	31-Jul-12	494094	Head Office	Voice	Static issue on phone lines.
24-Aug-12	02-Aug-12	489192	Store	Voice	Cutover of new phone lines was delayed
19-Sep-12	13-Sep-12	499313	Store	Voice	SSBC delay in removing service
24-Sep-12	12-Sep-12	501657	Head Office	Data	Ongoing discussions about naming delayed implementation
11-Oct-12	16-Aug-12	497487	Store	Data	Waiting for Eric Waterman, Security Technician, Corp Sec to visit store
30-Oct-12	19-Oct-12	505515	Store	Data	Required hub to be sent to store
31-Oct-12	18-Oct-12	500782	Store	Data	Delay in removing old ADSL circuit. New data line was installed on time.
21-Nov-12	09-Oct-12	505718	Store	Data	Ongoing pin pad issue. Ticket was closed and reopened several times. Problem finally determined to be an error in a DNS entry.
22-Nov-12	09-Nov-12	509552	Store	Data	Time needed to troubleshoot slow speed
07-Jan-13	18-Dec-12	515771	Store	Data	Time needed to get replacement WIPS sensor
04-Feb-13	30-Jan-13	519804	Store	Voice	Phone needed to be replaced
11-Apr-13	26-Mar-13	524633	Store	Voice	Delay getting information from client and delay getting Voice tree installed
12-Apr-13	05-Oct-12	504778	Store	Data	Cisco bug that was never resolved

End of Data Centre Chart Analysis

April 2013

