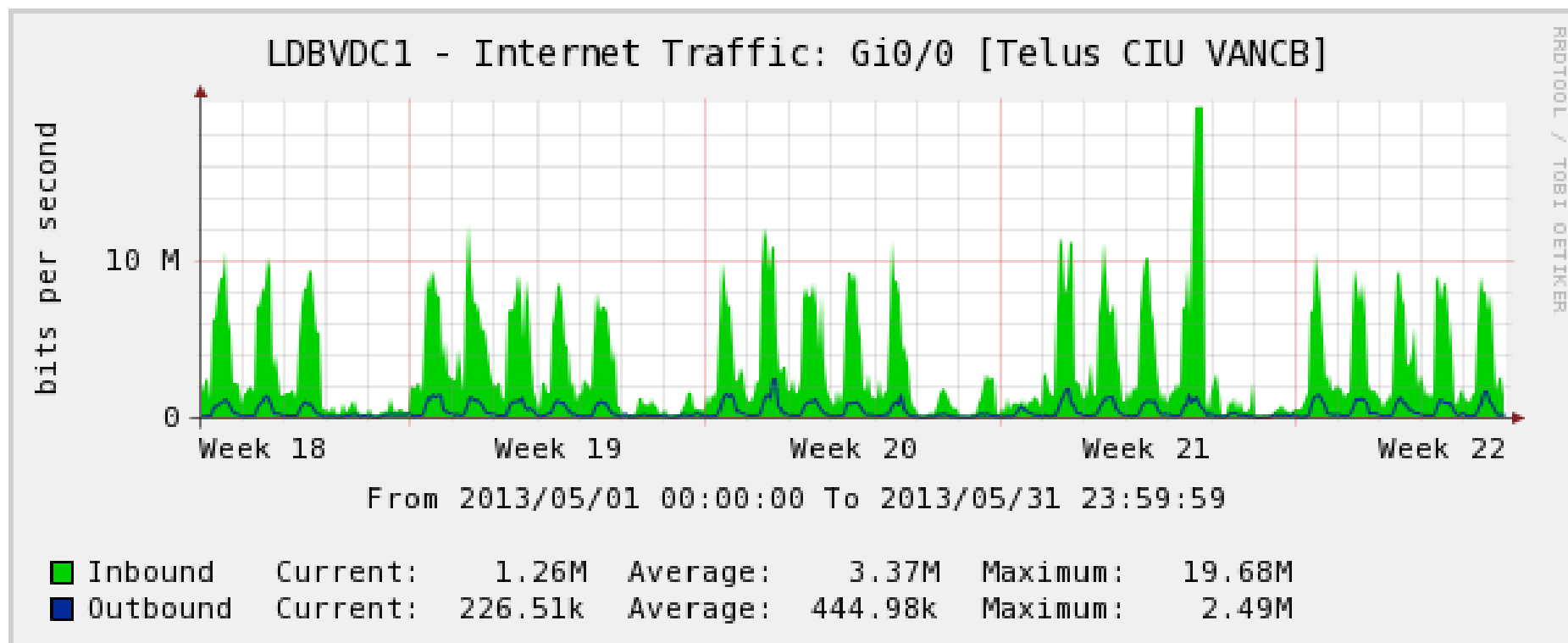


Data Centre Chart Analysis

May 2013

Monthly Vancouver, Head Office Internet Gateway- May 2013

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



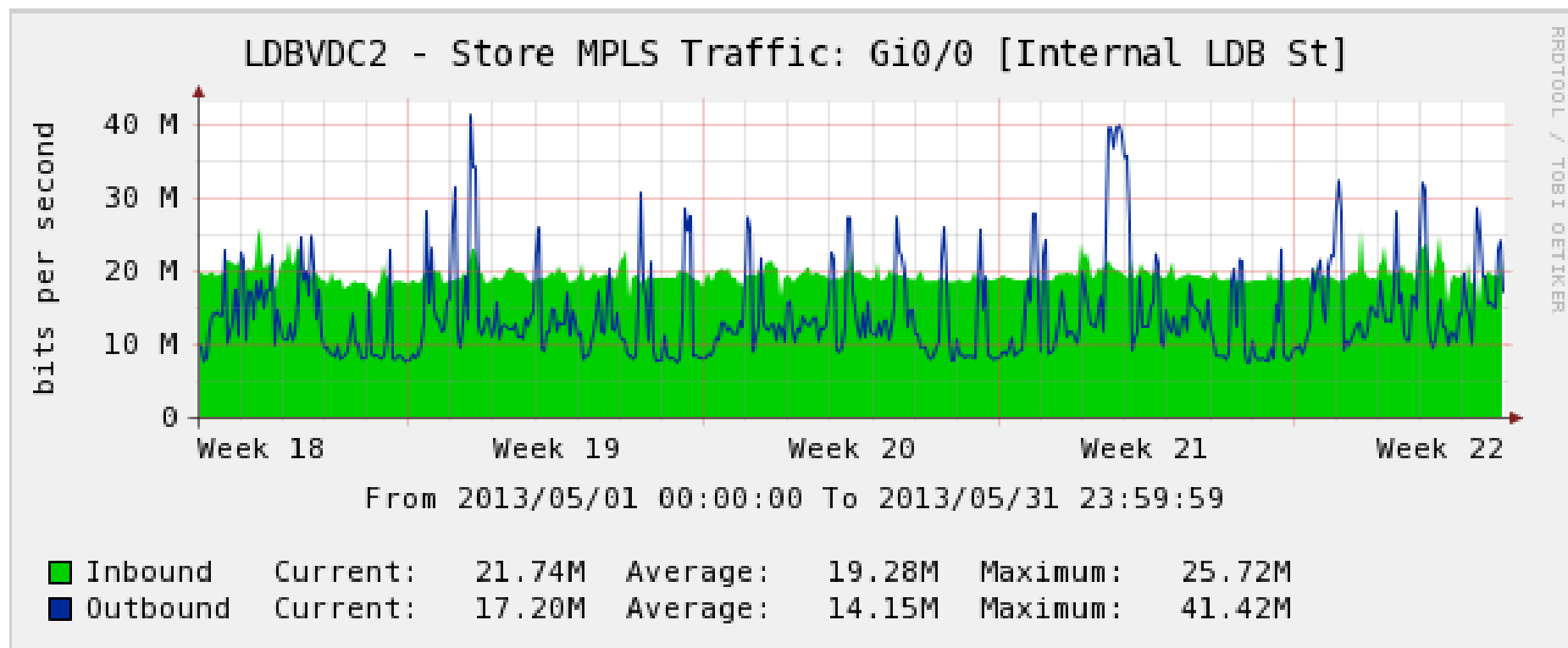
Summary: Graphical view of Head Office Internet data communications. The maximum capacity is 20Mbps.

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 – May 2013

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



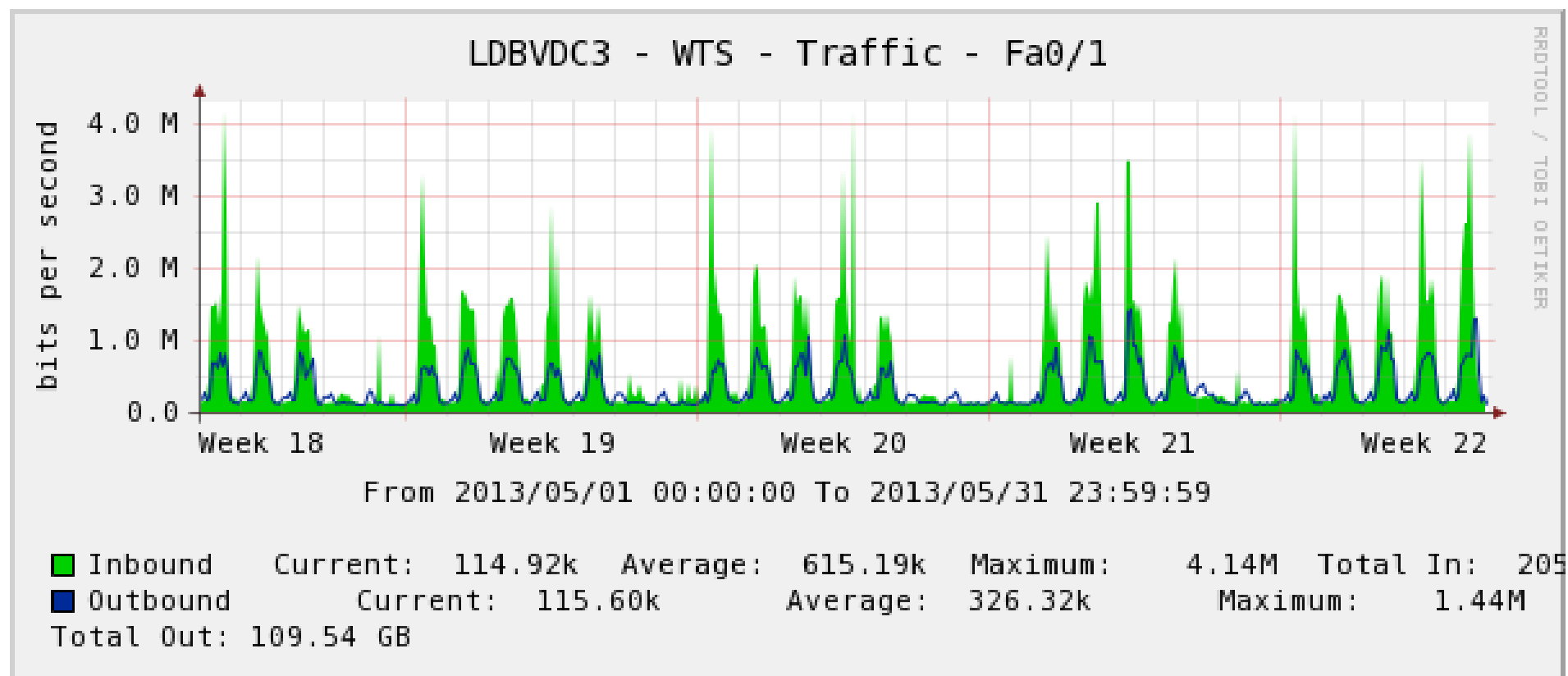
Summary: Graphical view of Head Office, Kamloops Distribution and Stores data communications. The maximum capacity is 100 Mbps.

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 – May 2013

For Corporate and Stores Email and Government websites communications



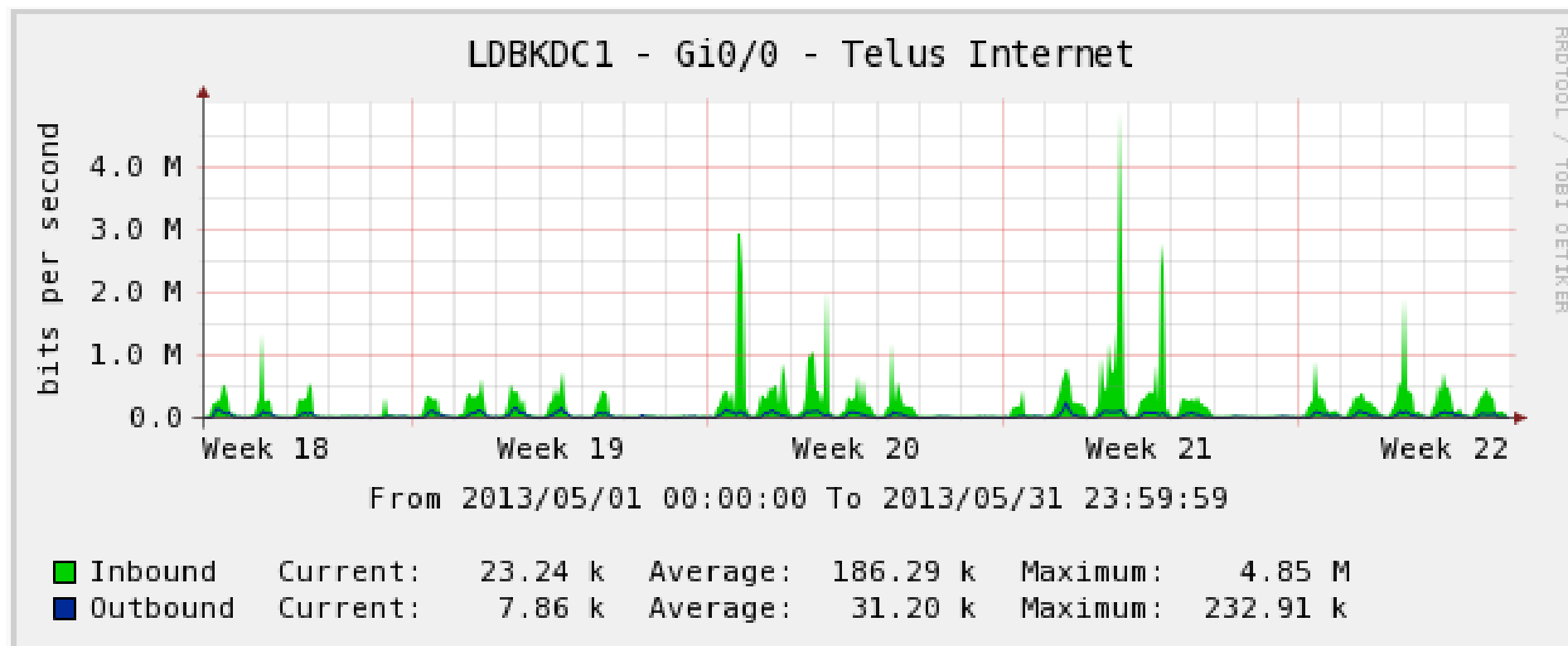
Summary: Graphical view of Head Office and Provincial government data communications. The maximum capacity is 10 Mbps.

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

Recommendation: Not applicable

Monthly Kamloops, Distribution Internet Gateway- May 2013

For WEB Browsing and other external business communications



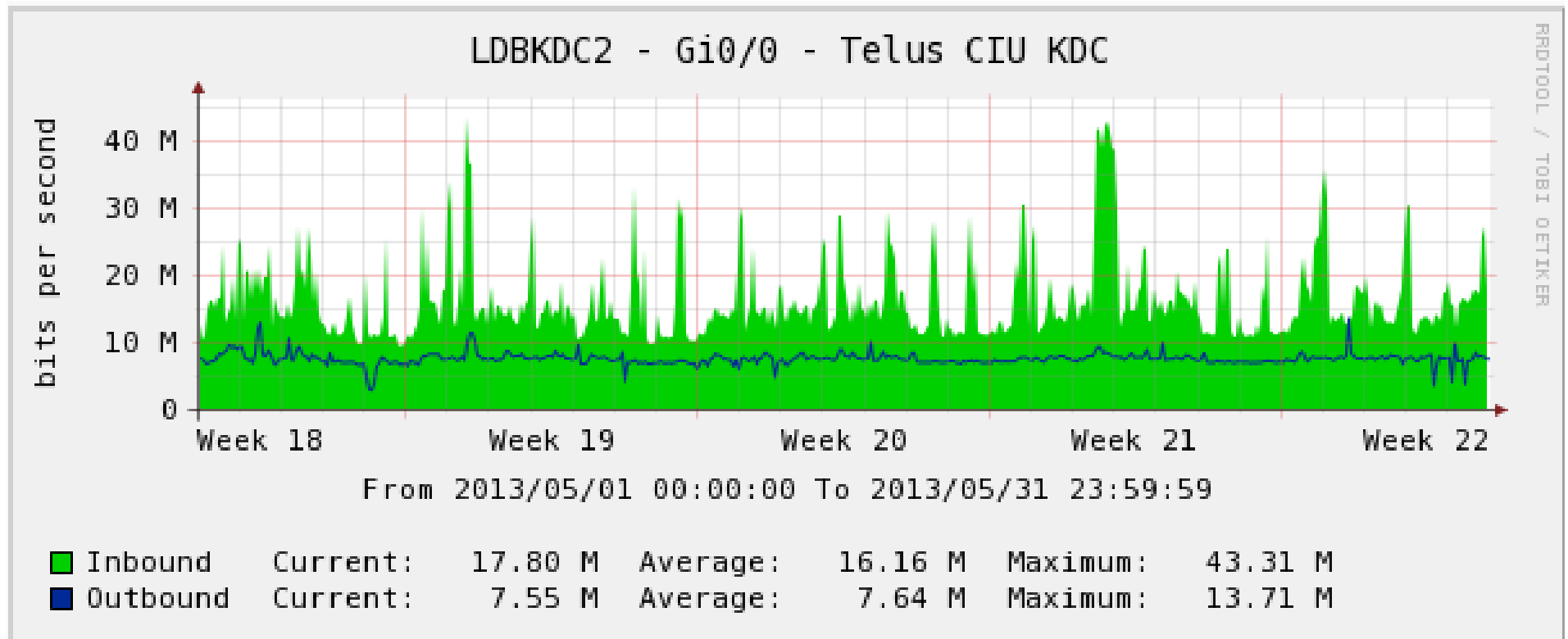
Summary: Graphical view of Kamloops Distribution Internet data communications. The maximum capacity is 10Mbps.

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

Recommendation: Not applicable

Monthly Kamloops, Distribution Private Network Gateway – May 2013

For Vancouver & Kamloops Data Centres communications and Store remote management



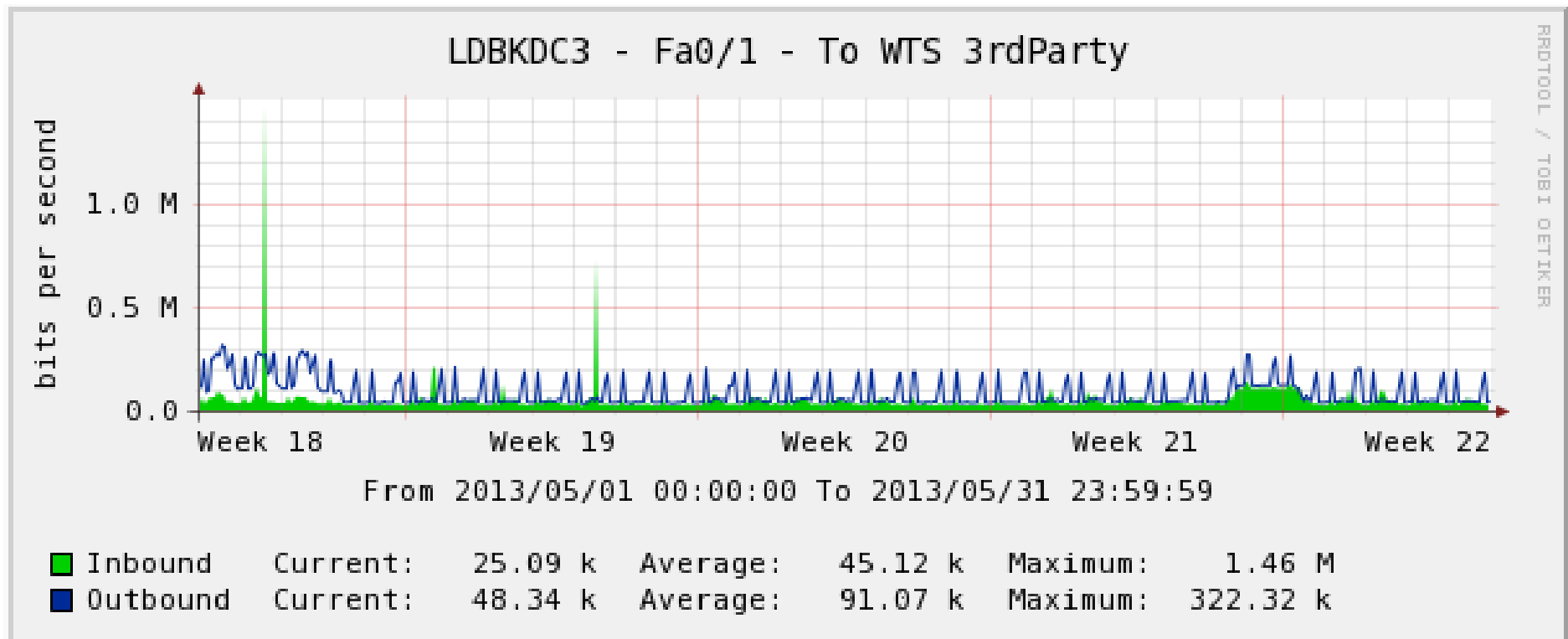
Summary: Graphical view of Head Office, Kamloops Distribution and Stores data communications. The maximum capacity is 100 Mbps.

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

Recommendation: Not applicable

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

For Corporate and Stores Email and Government websites communications

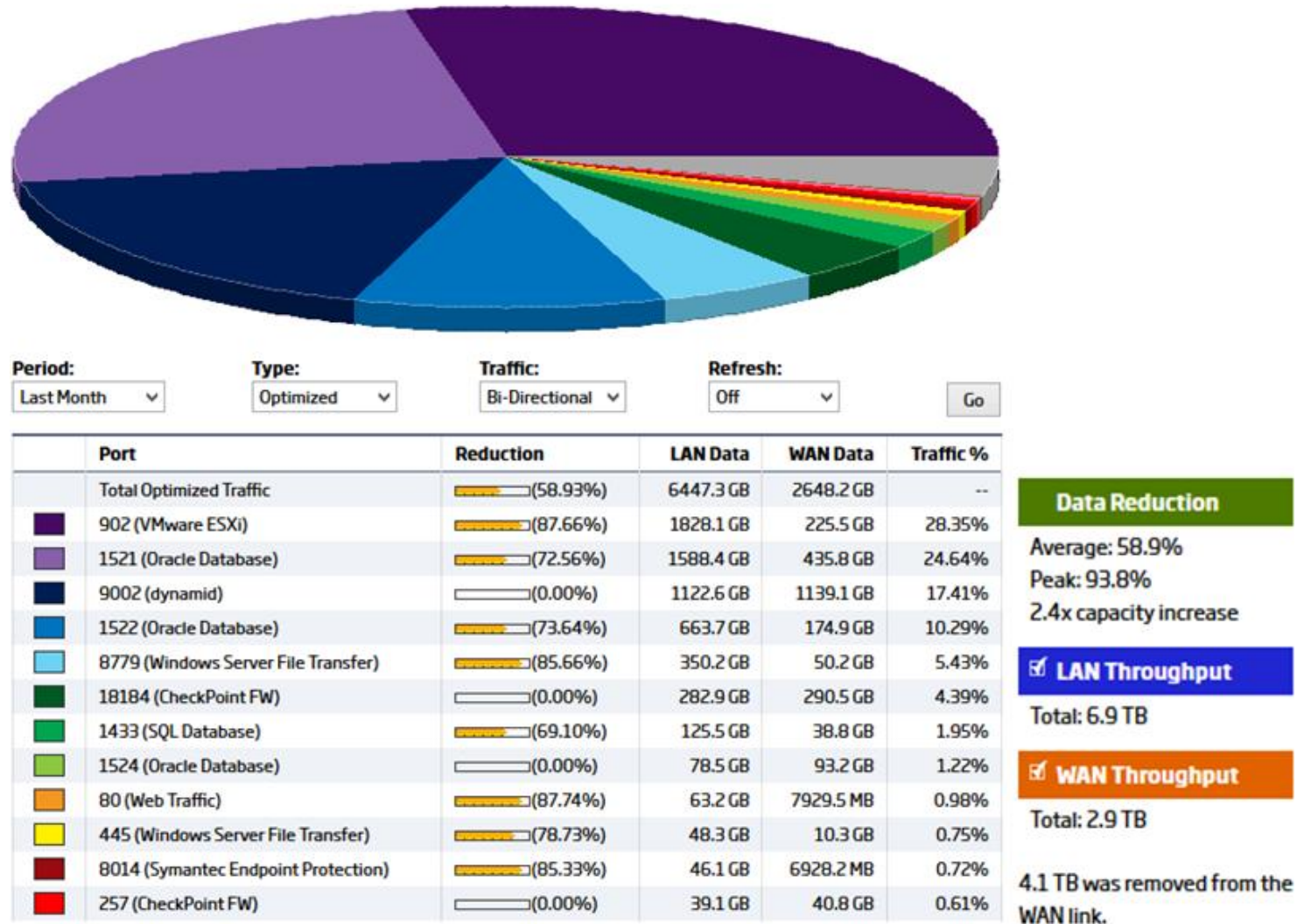


Summary: Graphical view of Kamloops, Distribution and Provincial government data communications. The maximum capacity is 10 Mbps.

Observation: Minimal use

Recommendation: Not applicable

VDC WAN Optimized Traffic Summary - May 2013

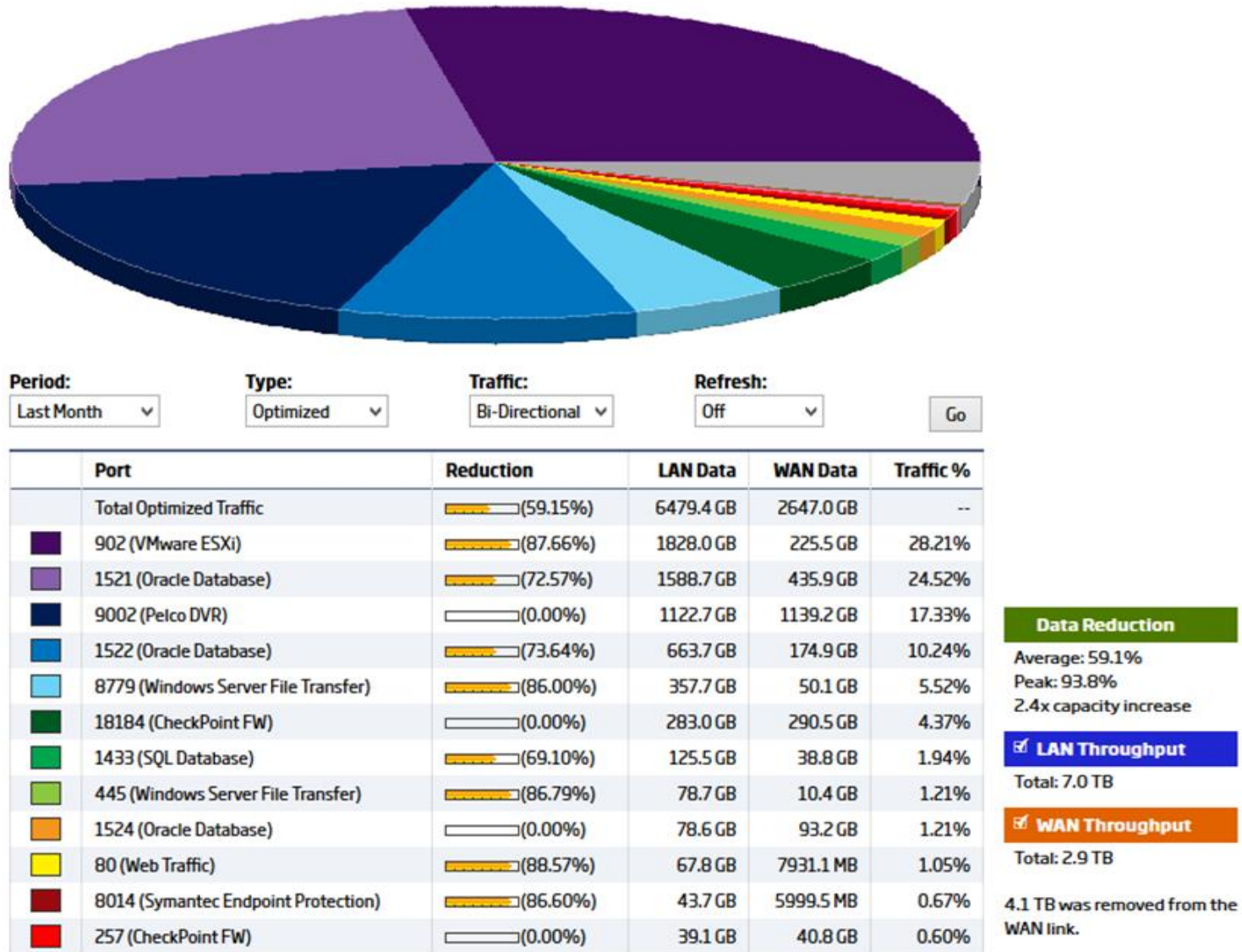


Summary: Optimized WAN traffic from VDC to KDC showing reduction in WAN traffic.

Observation: Total traffic was optimized by 58.9% resulting in a traffic decrease of 4.1 TB

Recommendation: Not applicable

KDC WAN Optimized Traffic Summary - May 2013



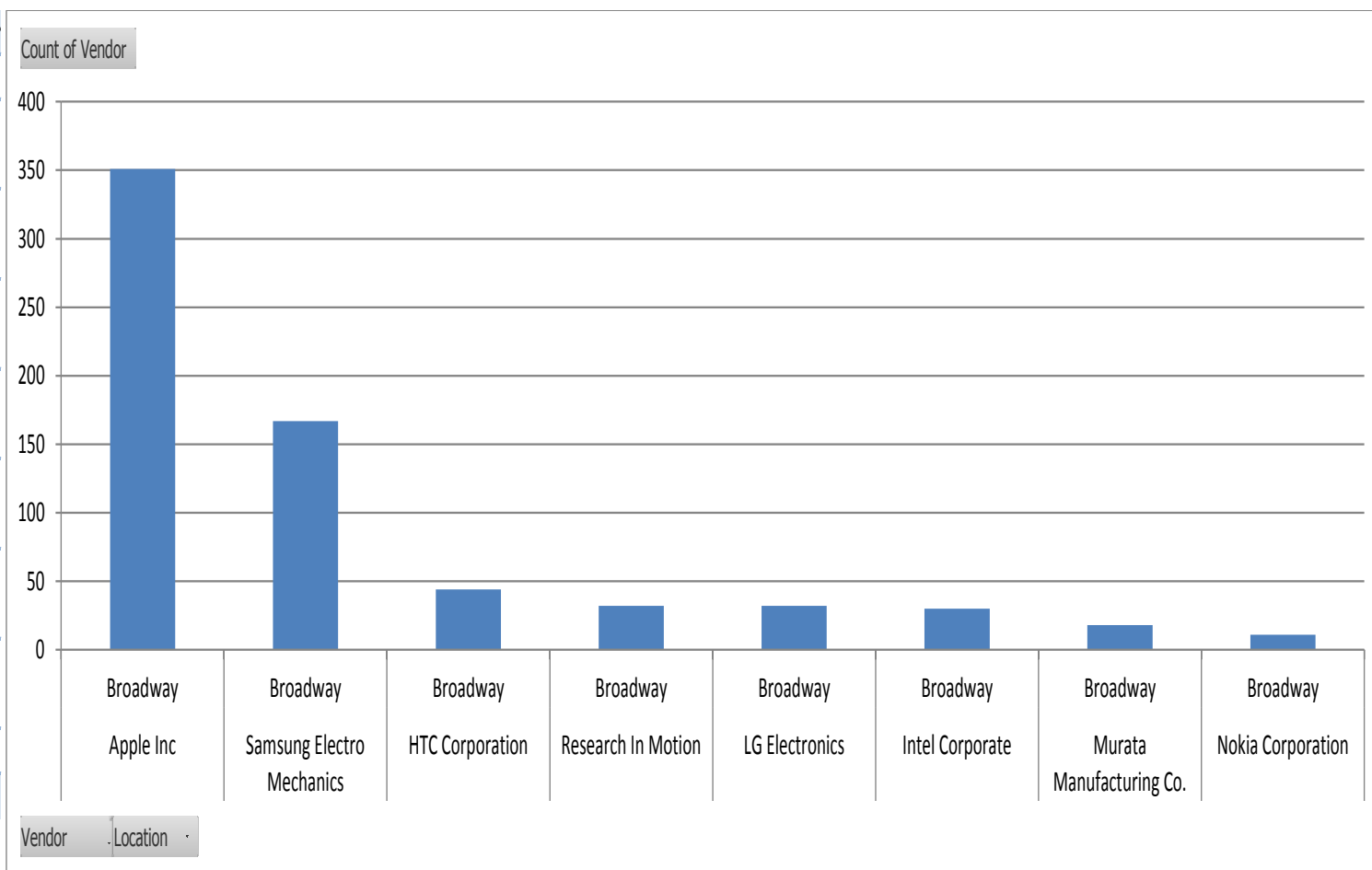
Summary: Optimized WAN traffic from KDC to VDC showing reduction in WAN traffic.

Observation: Total traffic was optimized by 59.1% resulting in a traffic decrease of 4.1 TB

Recommendation: Not applicable

Branch Public WiFi Access, no authentication required – May 2013

Tablet Manufacture	Count of Vendor
Apple Inc	351
Broadway	351
Samsung Electro Mechanics	167
Broadway	167
HTC Corporation	44
Broadway	44
Research In Motion	32
Broadway	32
LG Electronics	32
Broadway	32
Intel Corporate	30
Broadway	30
Murata Manufacturing Co.	18
Broadway	18
Nokia Corporation	11
Broadway	11
Grand Total	685



Summary:

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

Observation:

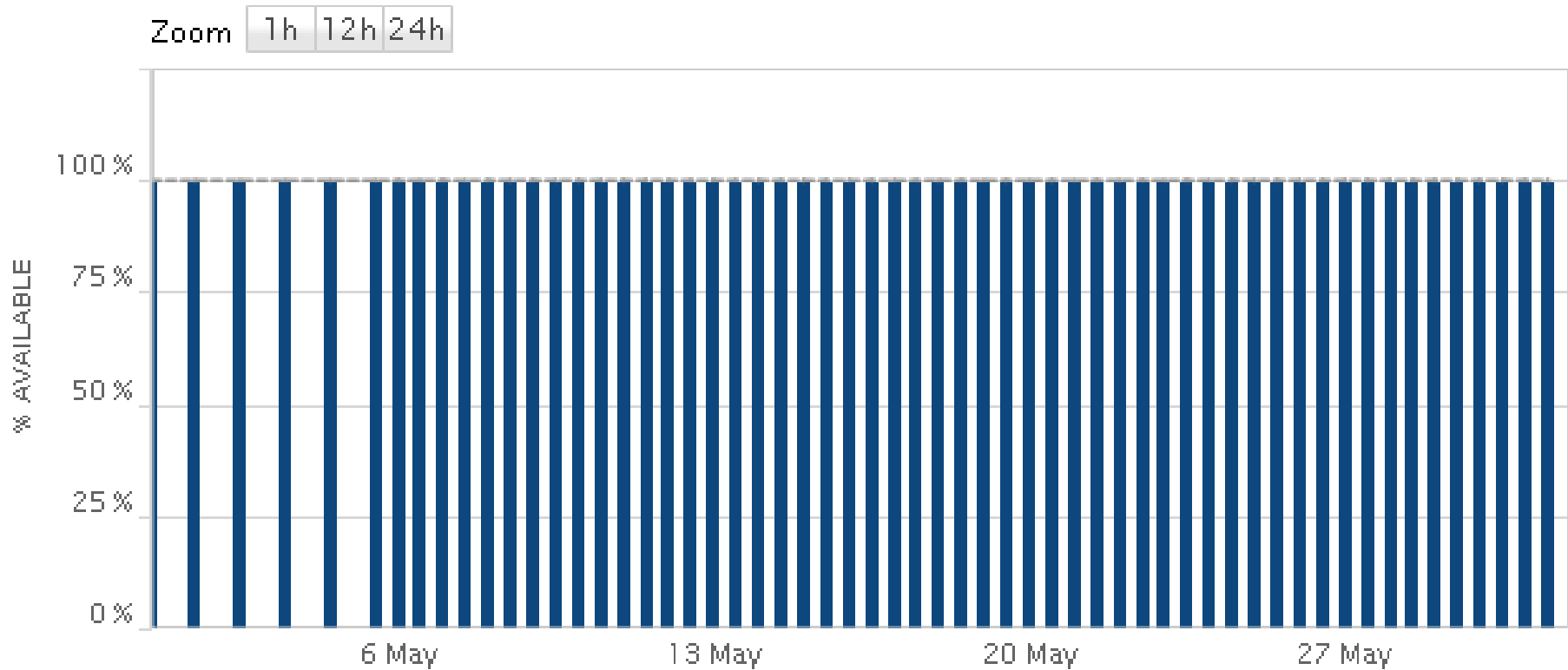
Please note the Rupert building WIFI reporting is missing due a update performed on the Access points names which was done in May. Some devices (Apple) automatically connect to visible Wi-Fi spots, but it does not necessarily reflect usage (they may not have agreed to the terms and actively use the hotspot).

Recommendation:

Access Points names for Rupert building will be populated on the report for the June report.

VDCGTM – VDC Global Traffic Manager Availability May 2013

GTM is used for DNS Load Balancing



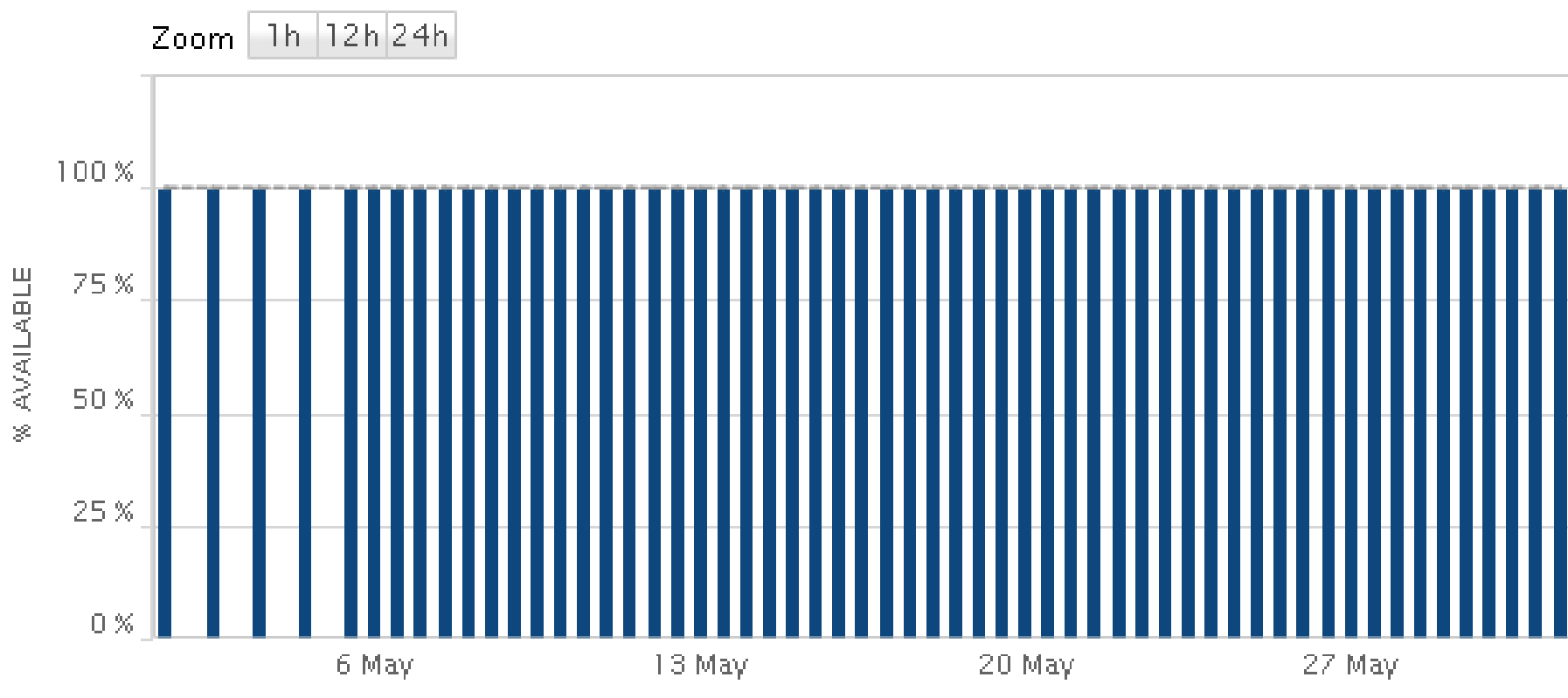
Summary: High level graphical view of VDC GTM Availability for the month of May 2013.

Observation: The beginning of the month there was GTM upgrade being performed by Network Services.

Recommendation: Not applicable

KDCGTM – VDC Global Traffic Manager Availability May 2013

GTM is used for DNS Load Balancing

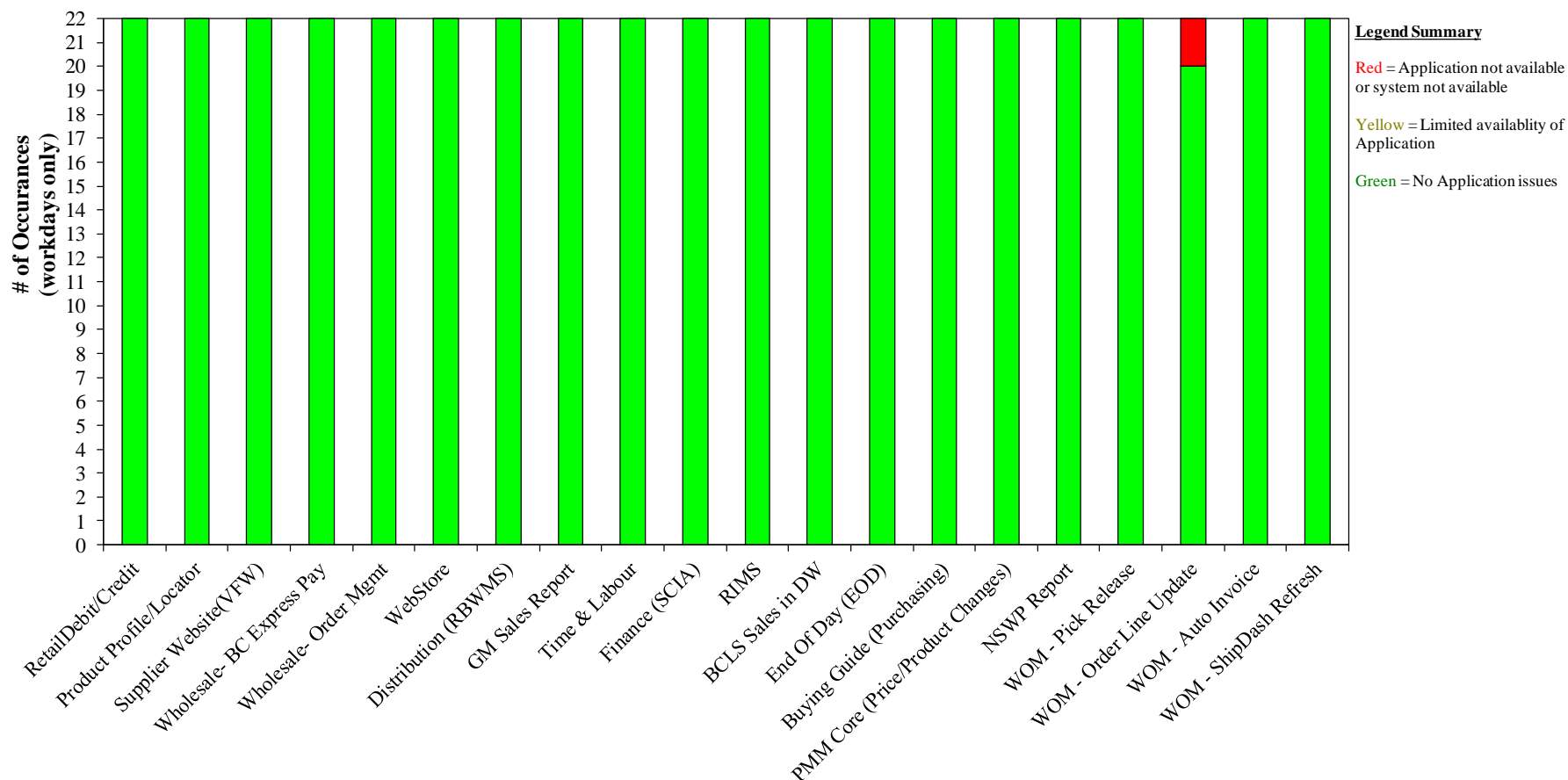


Summary: High level graphical view of KDC GTM Availability for the month of May 2013.

Observation: The beginning of the month there was GTM upgrade being performed by Network Services.

Recommendation: Not applicable

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



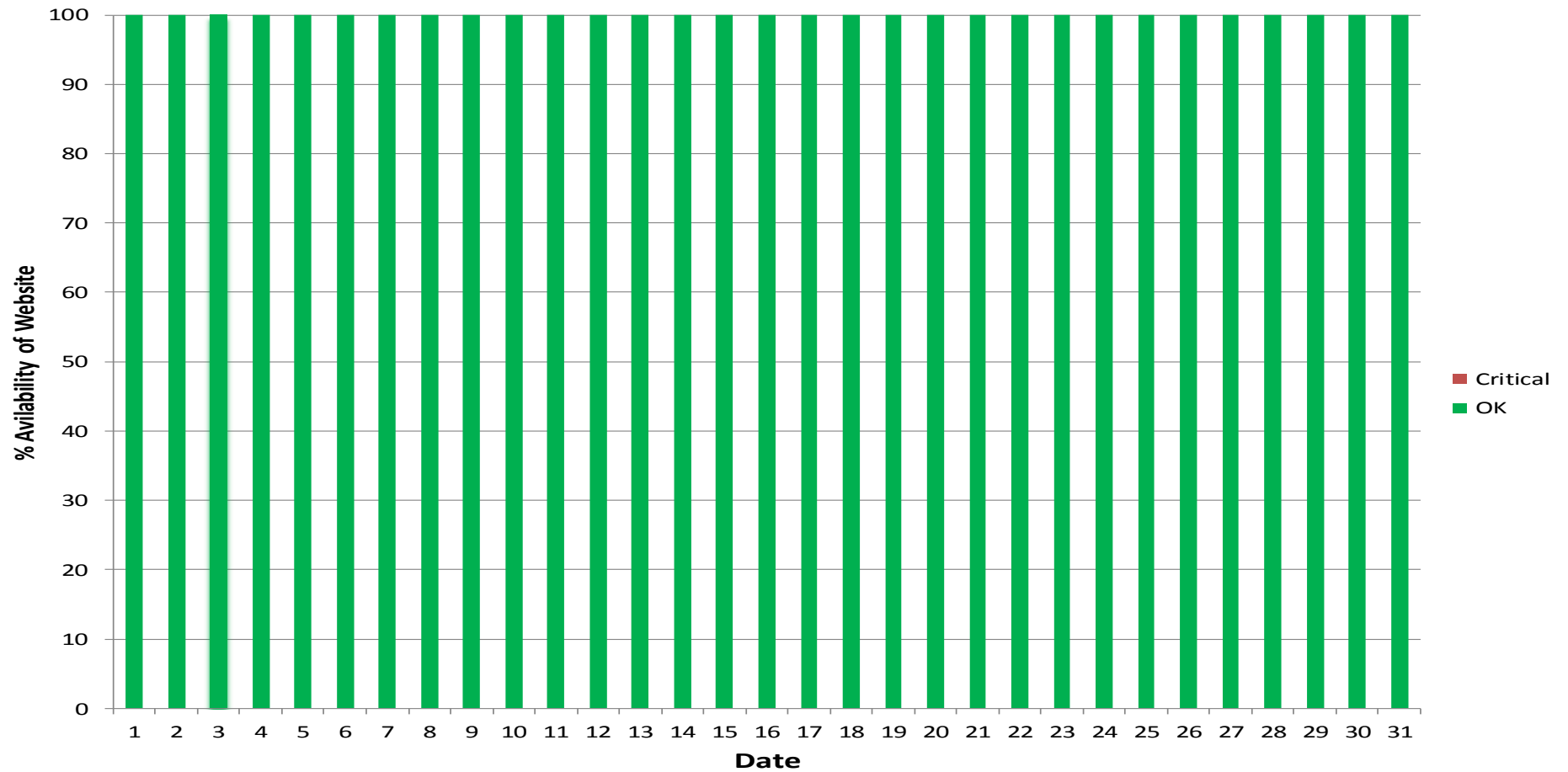
Key Applications

Summary: High level graphical view of Business Applications availability.

Observation: In May there was only one critical issue: WOM – Order line update - reached critical threshold .

Recommendation: Not applicable

WebStore Availability May 2013

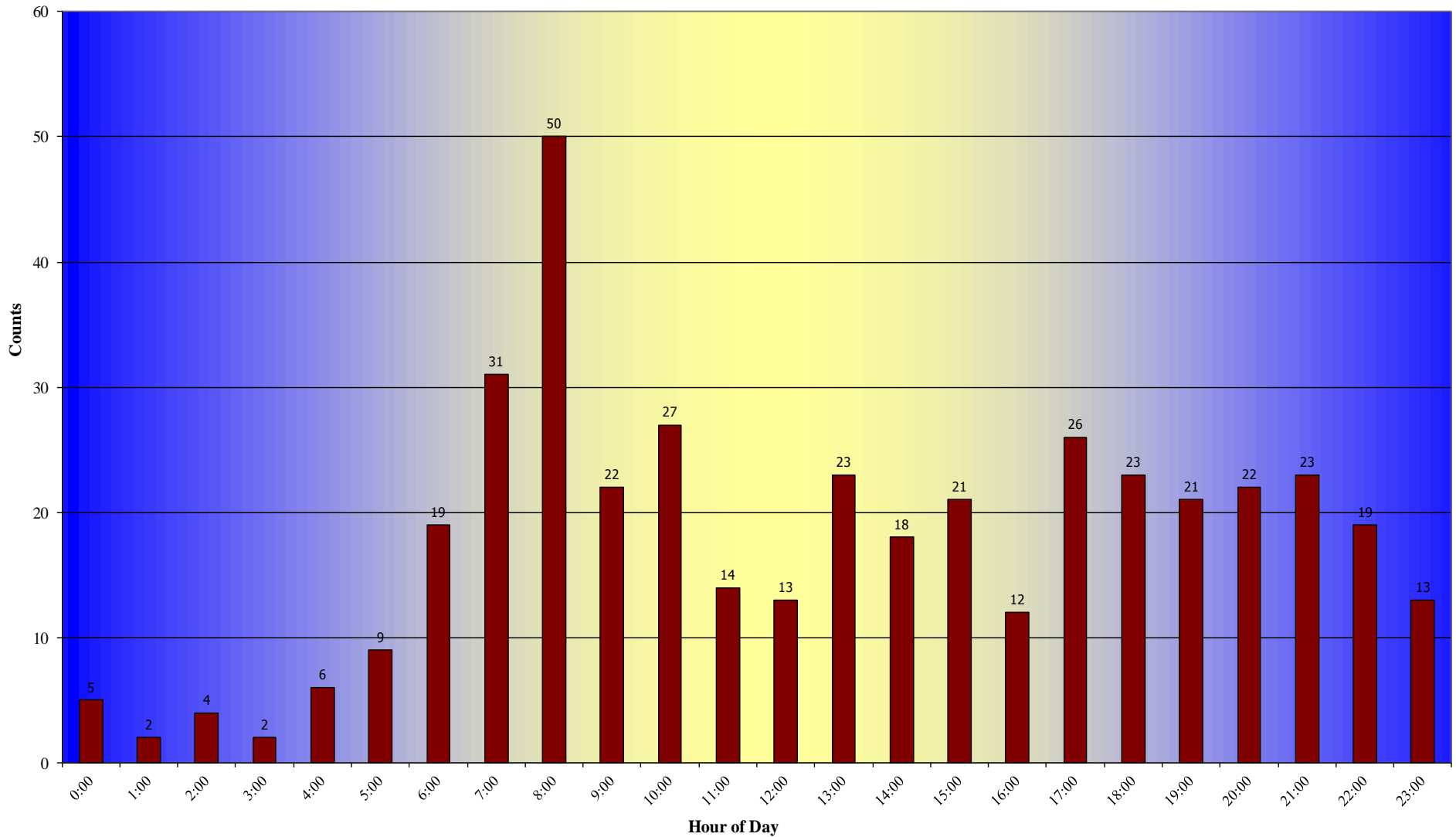


Summary: High level graphical view of Webstore's Availability for the month of May 2013.

Observation: There were no issues in the month of May in terms of WebStore outage or availability.

Recommendation: Not applicable

Weekday Remote Access – May 2013



Summary:

High level graphical view of Users remotely accessing Head Office resources in the Weekdays shown in hours of the day for the month of May.

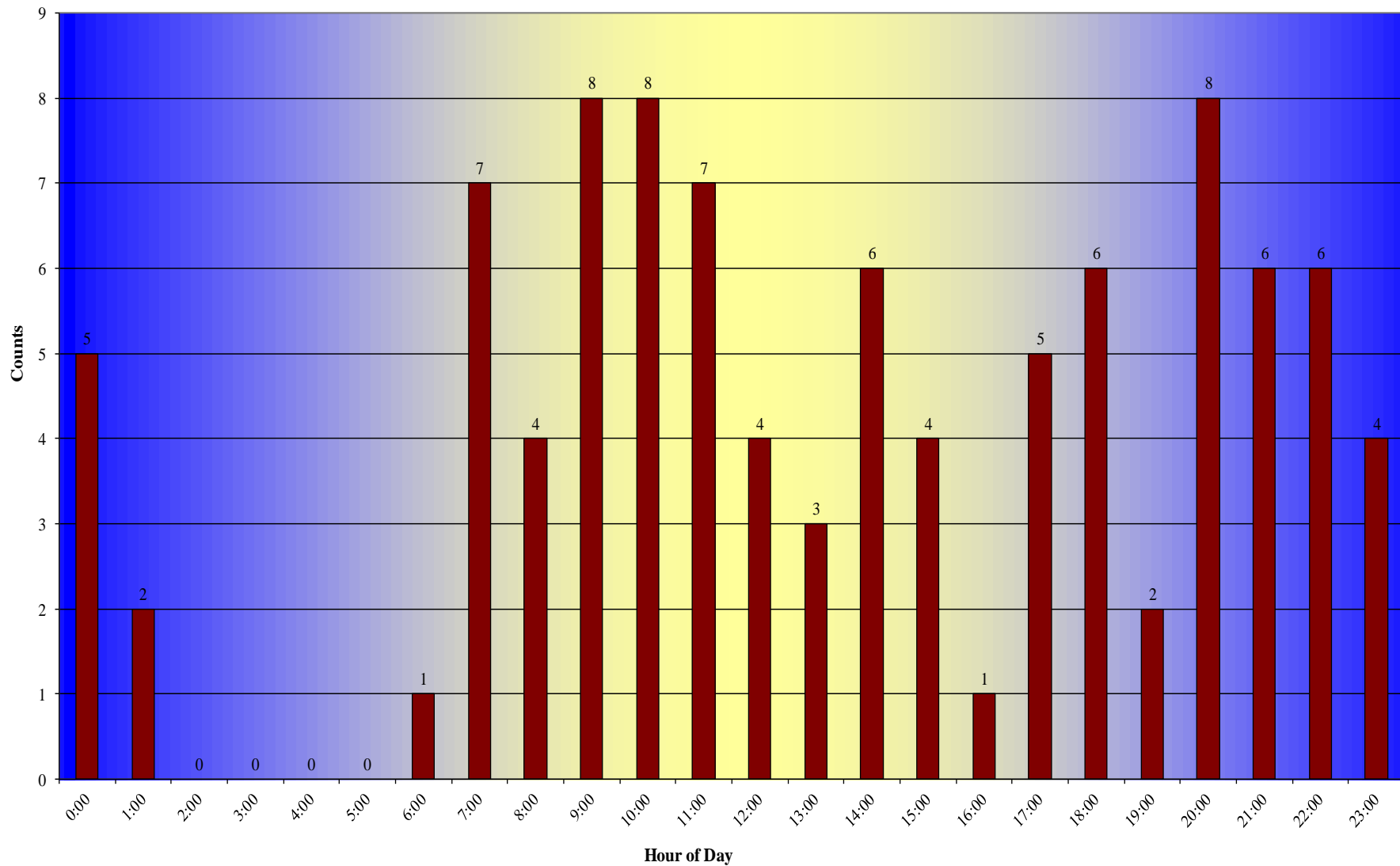
Observation:

More people accessing Head Office resources in the morning (6am – 9am) versus in the afternoon (between 5pm – 10pm). The high counts of users includes testing being done via Citrix Wireless Access.

Recommendation:

Not applicable

Weekend Remote Access – May 2013



Summary:

High level graphical view of Users remotely accessing Head Office resources on the Weekend shown in hours of the day for the month of May.

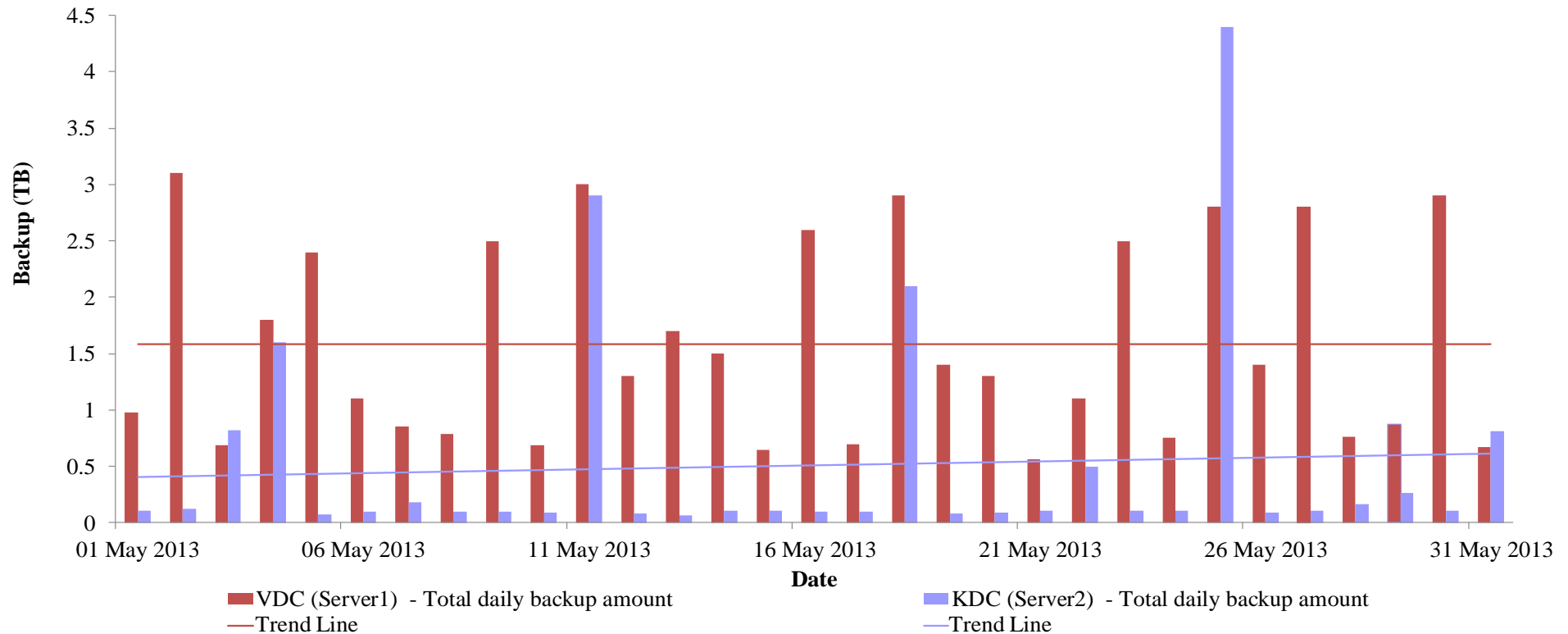
Observation:

More people accessing Head Office resources in the Weekday vs. Weekend no matter which time of day.

Recommendation:

Not applicable

Total Daily Backup Amount (TB) – May 2013



Summary:

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

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.

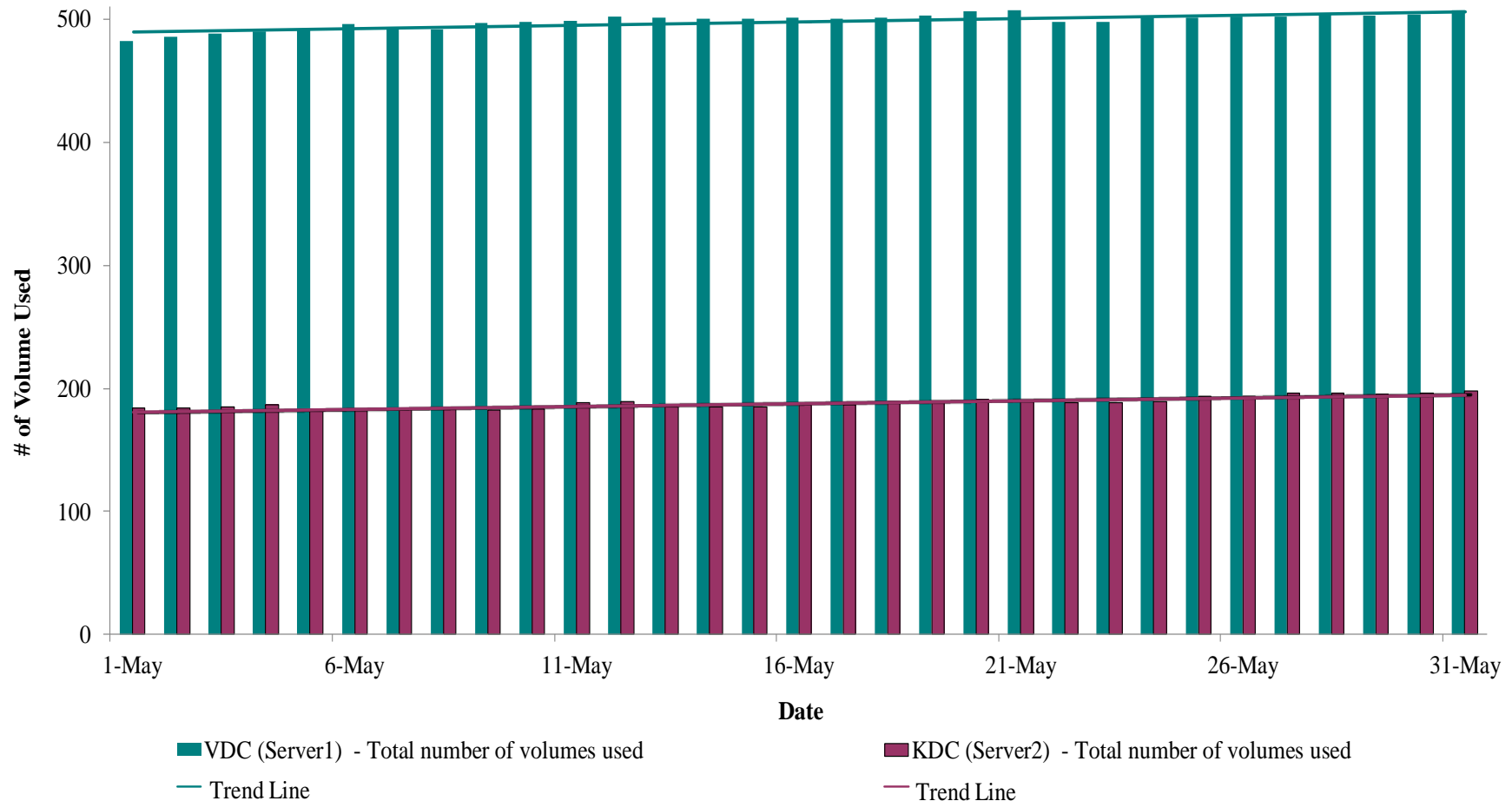
Observation:

On May 25th – Both KDC and VDC had over 7.2TB of SAN storage data backed up by TSM on to tape.

Recommendation:

Not applicable

Total Number of Volumes Used – May 2013



Summary:

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

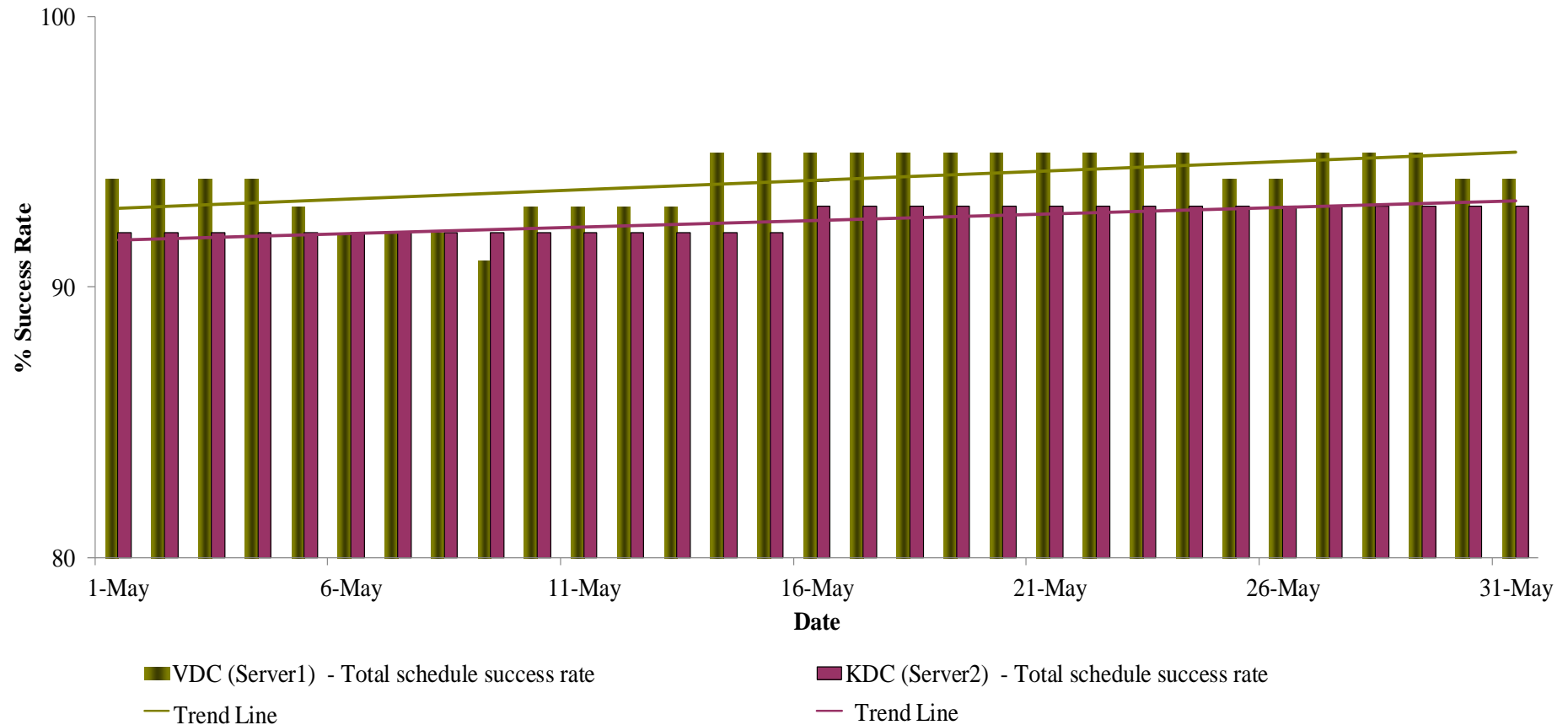
Observation:

The VDC library has 253 tape slots and 229 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 – May 2013

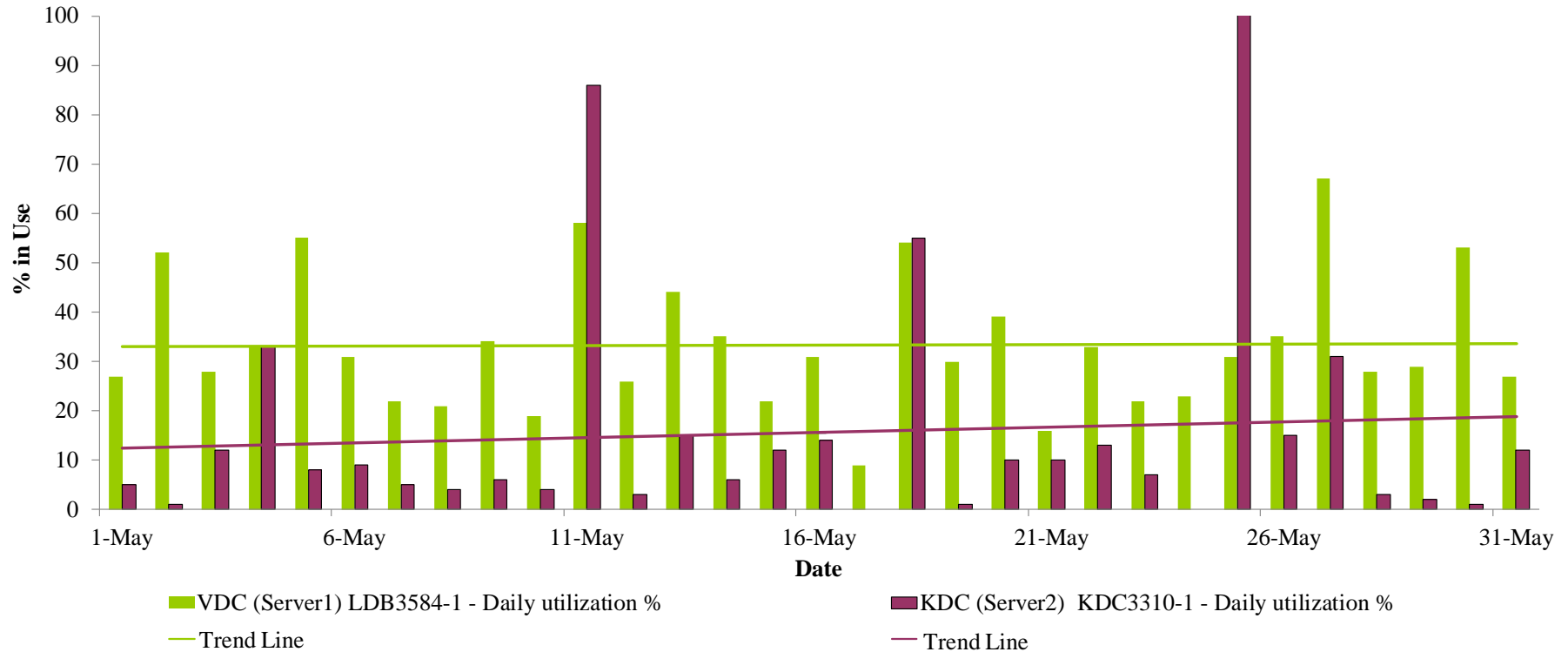


Summary: High level graphical view of TSM being successful in completing the backups on a daily basis for the month of May.

Observation: Continuing to work on the known client failures that are having problems.

Recommendation: Not applicable

Daily TSM Utilization (%) – May 2013



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

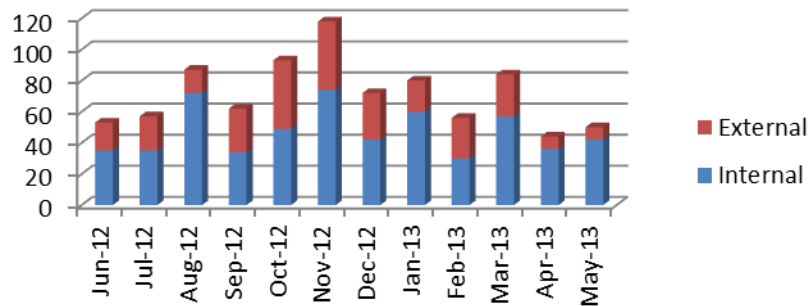
Observation: TSM is highly utilized on the weekends. Two times KDC TSM was more utilized versus VDC TSM.

Recommendation: Not applicable

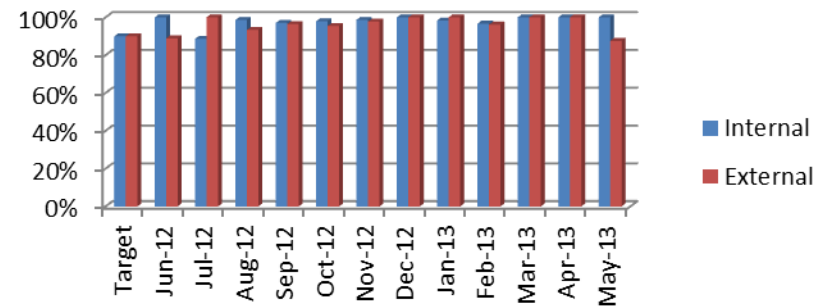
Network Service Statistics Summary

Totals	Target	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
Tickets closed		53	57	87	62	93	118	72	80	56	84	44	50
Completed on time		51	53	85	60	90	116	72	79	54	84	44	49
% Completed on time	90%	96%	93%	98%	97%	97%	98%	100%	99%	96%	100%	100%	98%
Internal													
Tickets closed		35	35	72	34	49	74	42	60	30	57	36	42
Completed on time		35	31	71	33	48	73	42	59	29	57	36	42
% Completed on time	90%	100%	89%	99%	97%	98%	99%	100%	98%	97%	100%	100%	100%
External (SSBC service)													
Tickets closed		18	22	15	28	44	44	30	20	26	27	8	8
Completed on time		16	22	14	27	42	43	30	20	25	27	8	7
% Completed on time	90%	89%	100%	93%	96%	95%	98%	100%	100%	96%	100%	100%	88%

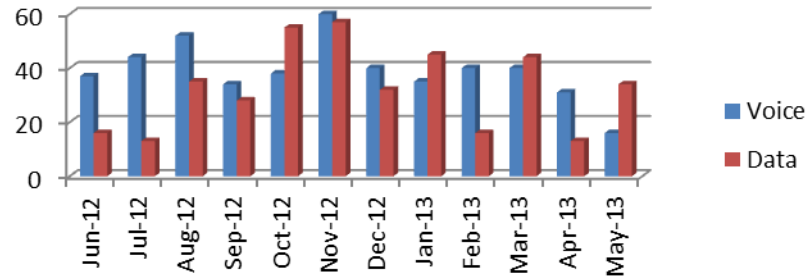
Tickets Closed



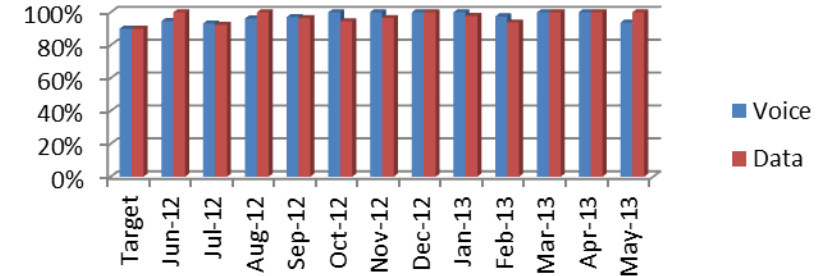
% Completed on Time



Tickets Closed by Type



% Completed on Time



Network Service Statistics Summary

Voice	Target	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
Tickets closed		37	44	52	34	38	61	40	35	40	40	31	16
Completed on time		35	41	50	33	38	61	40	35	39	40	31	15
% Completed on time	90%	95%	93%	96%	97%	100%	100%	100%	100%	98%	100%	100%	94%
Internal													
Tickets closed		19	25	42	11	12	35	20	21	19	16	26	11
Completed on time		19	22	41	11	12	35	20	21	19	16	26	11
% Completed on time	90%	100%	88%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%
External (SSBC service)													
Tickets closed		18	19	10	23	26	26	20	14	21	24	5	5
Completed on time		16	19	9	22	26	26	20	14	20	24	5	4
% Completed on time	90%	89%	100%	90%	96%	100%	100%	100%	100%	95%	100%	100%	80%

Data	Target	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
Tickets closed		16	13	35	28	55	57	32	45	16	44	13	34
Completed on time		16	12	35	27	52	55	32	44	15	44	13	34
% Completed on time	90%	100%	92%	100%	96%	95%	96%	100%	98%	94%	100%	100%	100%
Internal													
Tickets closed		16	10	30	23	37	39	22	39	11	41	10	31
Completed on time		16	9	30	22	36	38	22	38	10	41	10	31
% Completed on time	90%	100%	90%	100%	96%	97%	97%	100%	97%	91%	100%	100%	100%
External (SSBC service)													
Tickets closed		0	3	5	5	18	18	10	6	5	3	3	3
Completed on time		0	3	5	5	16	17	10	6	5	3	3	3
% Completed on time	90%	100%	100%	100%	100%	89%	94%	100%	100%	100%	100%	100%	100%

Network Service Statistics

Head Office Details

HO Voice	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
Tickets closed	28	36	48	20	29	48	30	22	31	32	27	13
Completed on time	26	33	46	20	29	48	30	22	31	32	27	12
% Completed on time	93%	92%	96%	100%	100%	100%	100%	100%	100%	100%	100%	92%
Internal												
Tickets closed	14	18	38	10	11	26	14	12	16	10	24	10
Completed on time	14	15	37	10	11	26	14	12	16	10	24	10
% Completed on time	100%	83%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%
External (SSBC service)												
Tickets closed	14	18	10	10	18	22	16	10	15	22	3	3
Completed on time	12	18	9	10	18	22	16	10	15	22	3	2
% Completed on time	86%	100%	90%	100%	100%	100%	100%	100%	100%	100%	100%	67%

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

Network Service Statistics

Branch Details

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

Branch Data	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
Tickets closed	10	2	19	14	39	42	19	27	10	26	3	28
Completed on time	10	2	19	14	36	40	19	26	10	26	3	28
% Completed on time	100%	100%	100%	100%	92%	95%	100%	96%	100%	100%	100%	100%
Internal												
Tickets closed	10	1	16	10	21	27	13	22	5	24	2	26
Completed on time	10	1	16	10	20	26	13	21	5	24	2	26
% Completed on time	100%	100%	100%	100%	95%	96%	100%	95%	100%	100%	100%	100%
External (SSBC service)												
Tickets closed	0	1	3	4	18	15	6	5	5	2	1	2
Completed on time	0	1	3	4	16	14	6	5	5	2	1	2
% Completed on time	0%	100%	100%	100%	89%	93%	100%	100%	100%	100%	100%	100%

Network Service Statistics

Response Date	Due	Incident	Location	Category	Reason for late Completion
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
23-May-13	17-May-13	537101	Head Office	Voice	Delay receiving password

End of Data Centre Chart Analysis

May 2013