Global Products And Services
Monthly Performance Analytics & Metrics Report

Month - Year

EXECUTIVE SUMMARY
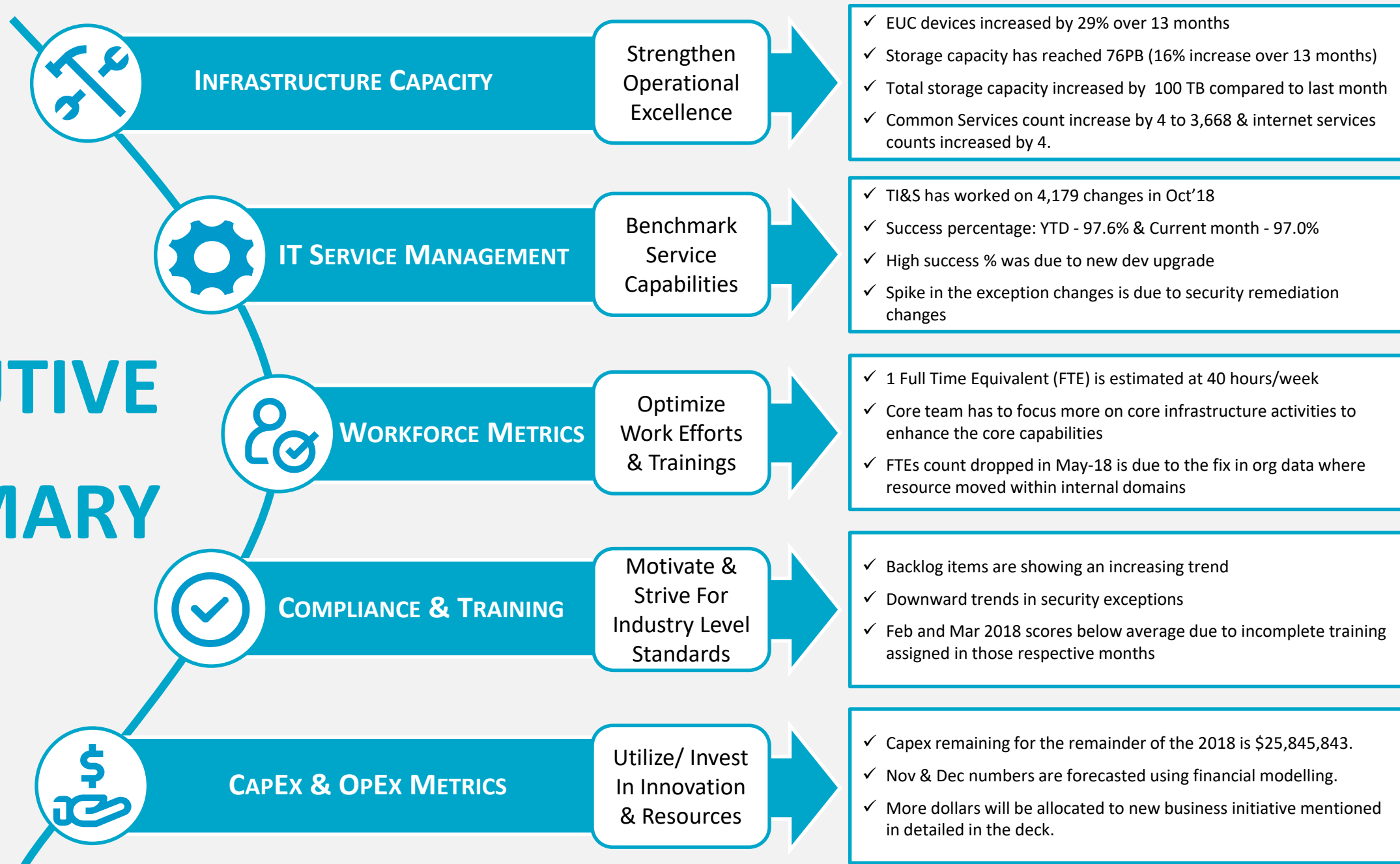
INFRASTRUCTURE CAPACITY
Strengthen Operational Excellence

- ✓ EUC devices increased by 29% over 13 months
- ✓ Storage capacity has reached 76PB (16% increase over 13 months)
- ✓ Total storage capacity increased by 100 TB compared to last month
- ✓ Common Services count increase by 4 to 3,668 & internet services counts increased by 4.

IT SERVICE MANAGEMENT
Benchmark Service Capabilities

- ✓ TI&S has worked on 4,179 changes in Oct'18
- ✓ Success percentage: YTD - 97.6% & Current month - 97.0%
- ✓ High success % was due to new dev upgrade
- ✓ Spike in the exception changes is due to security remediation changes

WORKFORCE METRICS
Optimize Work Efforts & Trainings

- ✓ 1 Full Time Equivalent (FTE) is estimated at 40 hours/week
- ✓ Core team has to focus more on core infrastructure activities to enhance the core capabilities
- ✓ FTEs count dropped in May-18 is due to the fix in org data where resource moved within internal domains

COMPLIANCE & TRAINING
Motivate & Strive For Industry Level Standards

- ✓ Backlog items are showing an increasing trend
- ✓ Downward trends in security exceptions
- ✓ Feb and Mar 2018 scores below average due to incomplete training assigned in those respective months

CapEx & OpEx METRICS
Utilize/ Invest In Innovation & Resources

- ✓ Capex remaining for the remainder of the 2018 is $25,845,843.
- ✓ Nov & Dec numbers are forecasted using financial modelling.
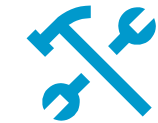- ✓ More dollars will be allocated to new business initiative mentioned in detailed in the deck.
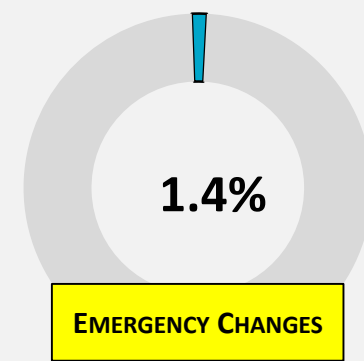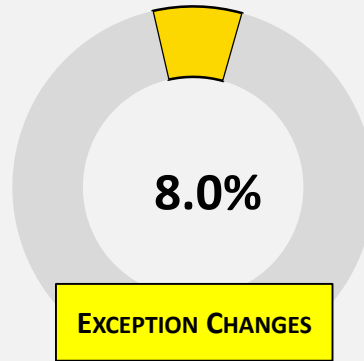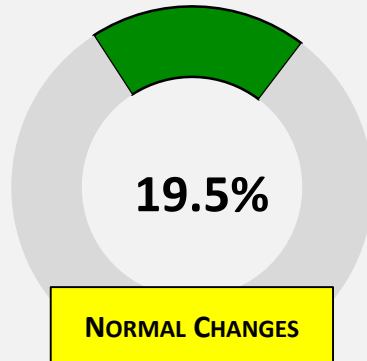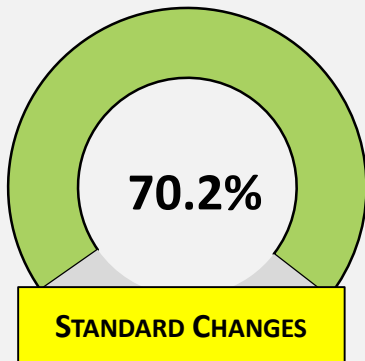
TABLE OF CONTENTS

IT Service Management Metrics

Service Quality; Service delivery metrics; Change management; Incident management; Problem management; Online transaction volumes; Availability and in depth analysis.
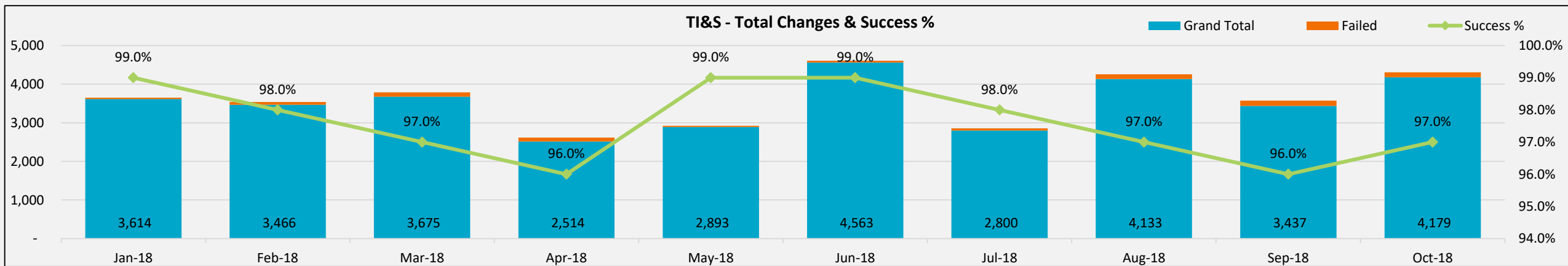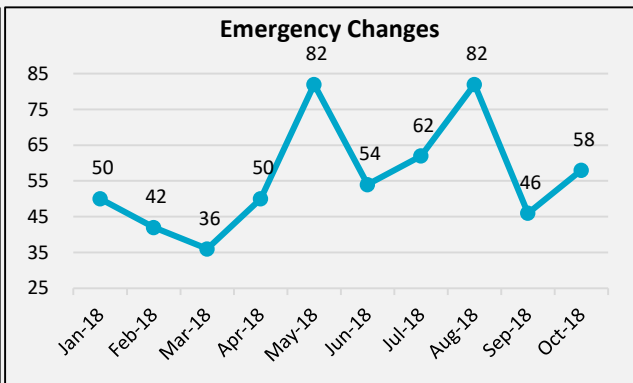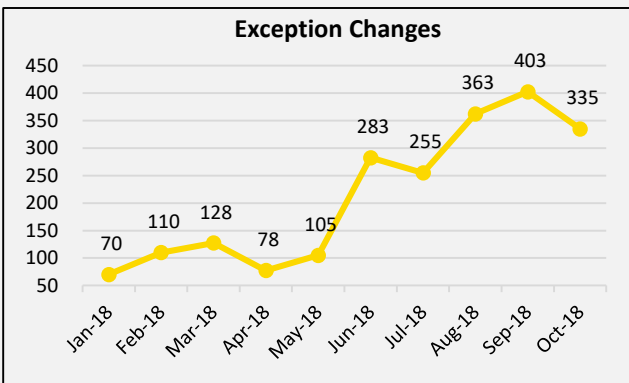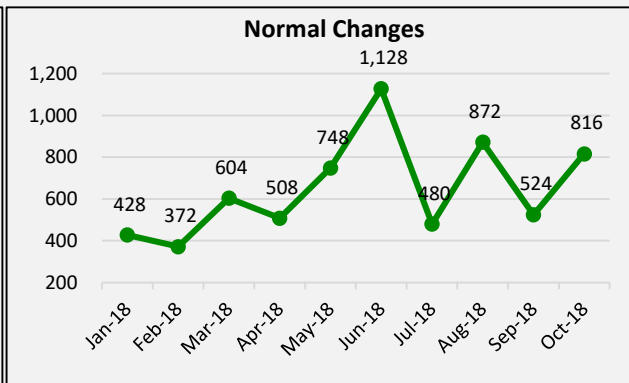
CHANGE MANAGEMENT

OCTOBER

70.2%
STANDARD CHANGES

19.5%
NORMAL CHANGES

8.0%
EXCEPTION CHANGES

1.4%
EMERGENCY CHANGES

KEY MESSAGE

- TI&S has worked on 4,179 changes in Oct'18
- Success percentage: YTD - 97.6% & Current month - 97.0%
- High success % was due to new dev upgrade
- Spike in the exception changes is due to security remediation changes

Standard Changes

2,984 2,840 2,822 1,809 1,850 3,015 1,949 2,799 2,444 2,934

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18

Normal Changes

428 372 604 508 748 1,128 480 872 524 816

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18

Exception Changes

70 110 128 78 105 283 255 363 403 335

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18

Emergency Changes

50 42 36 50 82 54 62 82 46 58

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18

TI&S - Total Changes & Success %

Grand Total   Failed   Success %

	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Success %	99.0%	98.0%	97.0%	96.0%	99.0%	99.0%	98.0%	97.0%	96.0%	97.0%
Grand Total	3,614	3,466	3,675	2,514	2,893	4,563	2,800	4,133	3,437	4,179

INCIDENT MANAGEMENT

YTD – INCIDENT SUMMARY

P1
TOTAL - 42
- ❖ CLOSED : 42
- ❖ NEW : 0
- ❖ ON-HOLD : 0
- ❖ RESOLVED : 0
- ❖ WIP : 0

P2
TOTAL - 133
- ❖ CLOSED : 133
- ❖ NEW : 0
- ❖ ON-HOLD : 0
- ❖ RESOLVED : 0
- ❖ WIP : 0

P3
TOTAL – 708
- ❖ CLOSED : 700
- ❖ NEW : 0
- ❖ ON-HOLD : 3
- ❖ RESOLVED : 2
- ❖ WIP : 3

CURRENT MONTH – INCIDENT SUMMARY

P1
TOTAL - 8
- ❖ CLOSED : 8
- ❖ NEW : 0
- ❖ ON-HOLD : 0
- ❖ RESOLVED : 0
- ❖ WIP : 0

P2
TOTAL - 8
- ❖ CLOSED : 8
- ❖ NEW : 0
- ❖ ON-HOLD : 0
- ❖ RESOLVED : 0
- ❖ WIP : 0

P3
TOTAL – 56
- ❖ CLOSED : 48
- ❖ NEW : 0
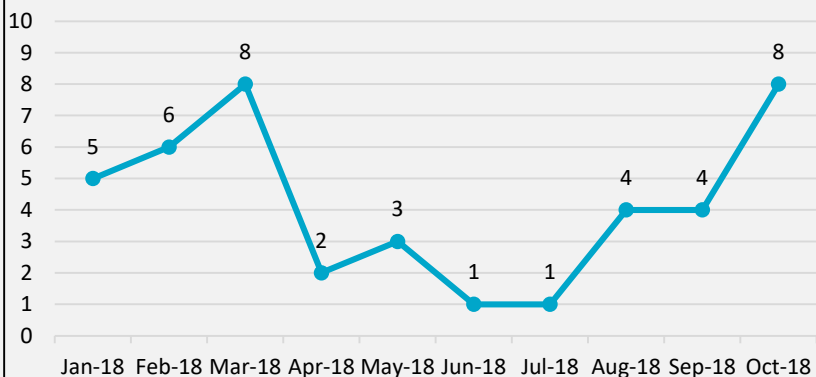- ❖ ON-HOLD : 3
- ❖ RESOLVED : 2
- ❖ WIP : 3

KEY MESSAGE

- All incidents reported are run by Major Incident management team.
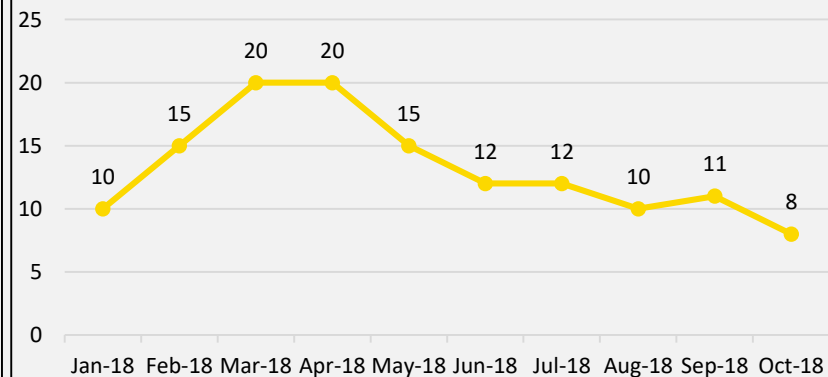- Direct customer impacting P2 and P3 outages have declined significantly
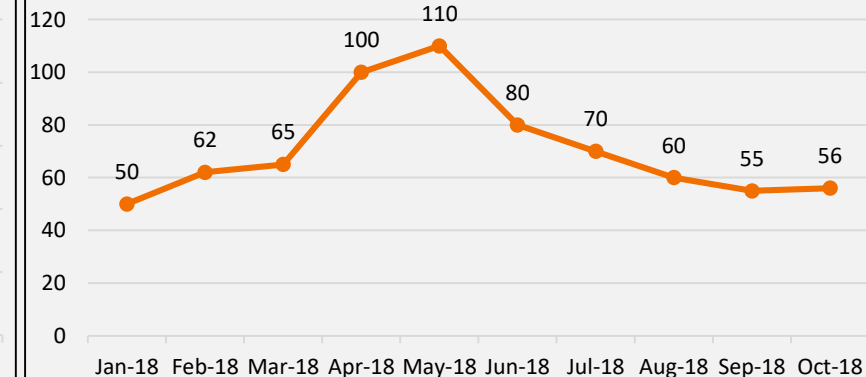
All (P1-P5) Outages
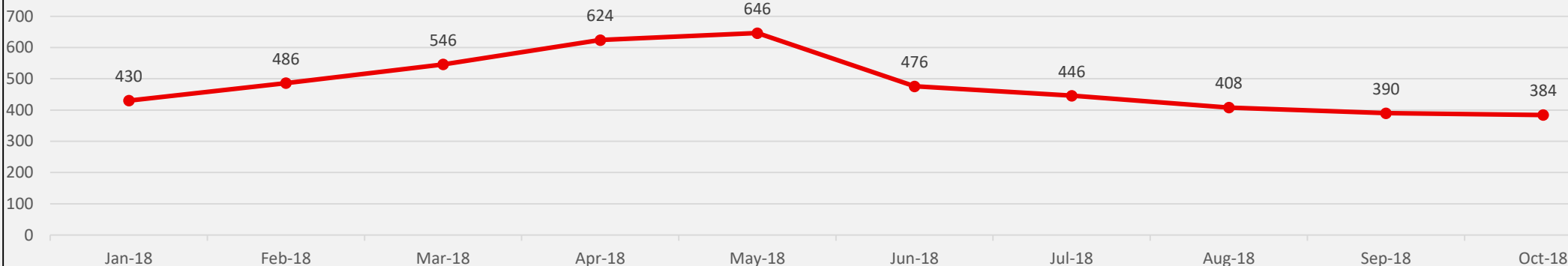
Month	Value
Jan-18	430
Feb-18	486
Mar-18	546
Apr-18	624
May-18	646
Jun-18	476
Jul-18	446
Aug-18	408
Sep-18	390
Oct-18	384

Major (P1) Outages

Month	Value
Jan-18	5
Feb-18	6
Mar-18	8
Apr-18	2
May-18	3
Jun-18	1
Jul-18	1
Aug-18	4
Sep-18	4
Oct-18	8

Emergency (P2) Outages

Month	Value
Jan-18	10
Feb-18	15
Mar-18	20
Apr-18	20
May-18	15
Jun-18	12
Jul-18	12
Aug-18	10
Sep-18	11
Oct-18	8

High (P3) Outages

Month	Value
Jan-18	50
Feb-18	62
Mar-18	65
Apr-18	100
May-18	110
Jun-18	80
Jul-18	70
Aug-18	60
Sep-18	55
Oct-18	56

PROBLEM MANAGEMENT

YTD - TOP 7

ROOT CAUSE

CHANGE	PROCEDURAL	SOFTWARE	UNKNOWN	CAPACITY	HARDWARE	DATABASE
28%	**17%**	**14%**	**14%**	**9%**	**8%**	**7%**
64 out of 230	40 out of 230	32 out of 230	32 out of 230	20 out of 230	18 out of 230	16 out of 230

KEY MESSAGE

- Domain teams are proactively resolving more problem tickets.
- Global services has hit by 54 followed by online services with 52 outages.
- A high senior leadership meeting have been setup to address the impact on the listed services.

YTD - Top 10 Services Impacted By Outages

Service	Value
Global services	54
Online services	52
Data Center	42
IC house	32
UDSN	30
CCDTUC	28
TRFU	28
SRC / SRC5	28
TUD Rerect	22
ANUT	22
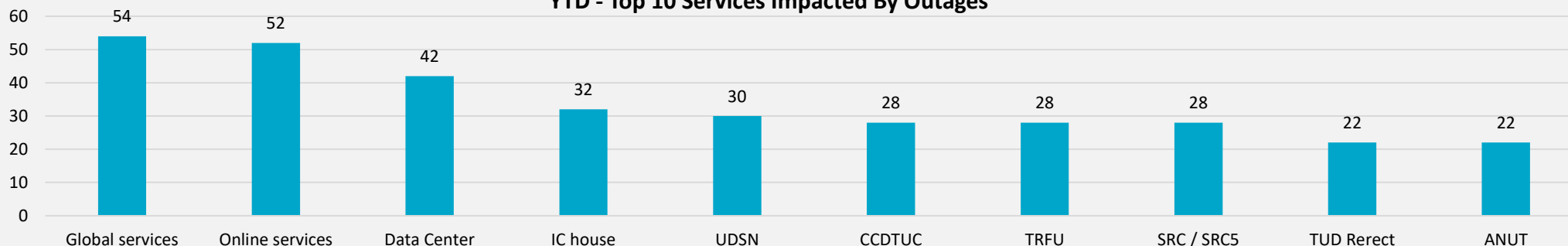
Problem Task With Status
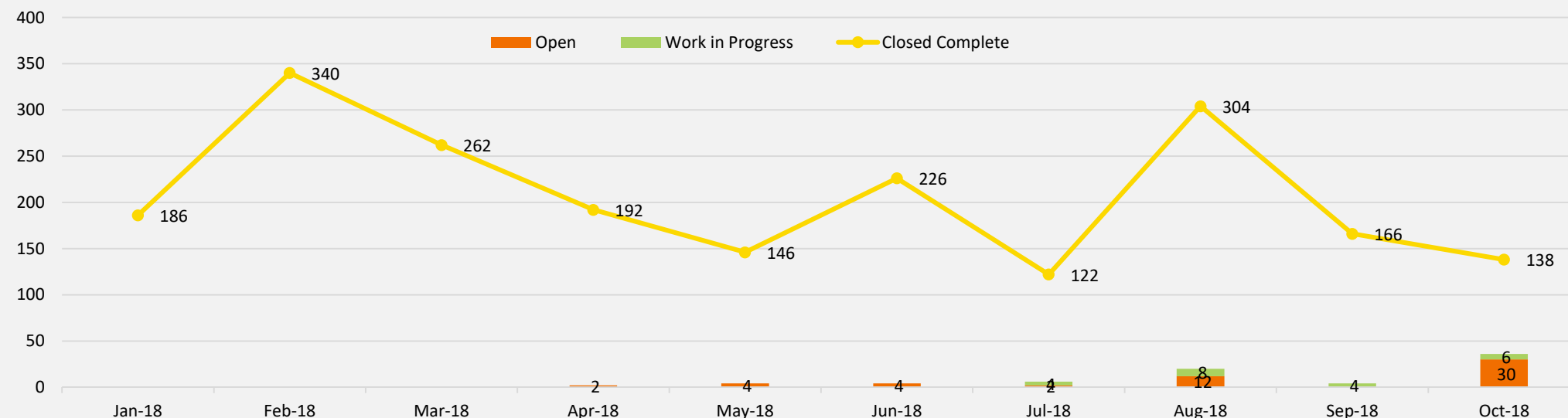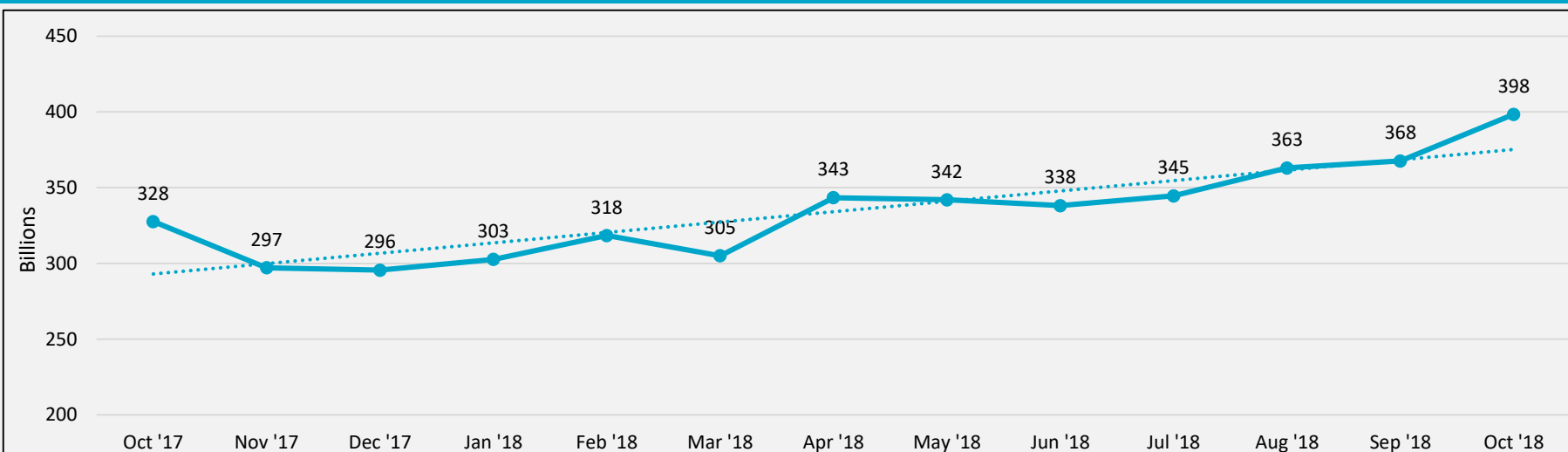
Legend: Open, Work in Progress, Closed Complete

Closed Complete:
- Jan-18: 186
- Feb-18: 340
- Mar-18: 262
- Apr-18: 192
- May-18: 146
- Jun-18: 226
- Jul-18: 122
- Aug-18: 304
- Sep-18: 166
- Oct-18: 138

Other values:
- Apr-18: 2
- May-18: 4
- Jun-18: 4
- Jul-18: 4
- Aug-18: 8, 12
- Sep-18: 4
- Oct-18: 6, 30
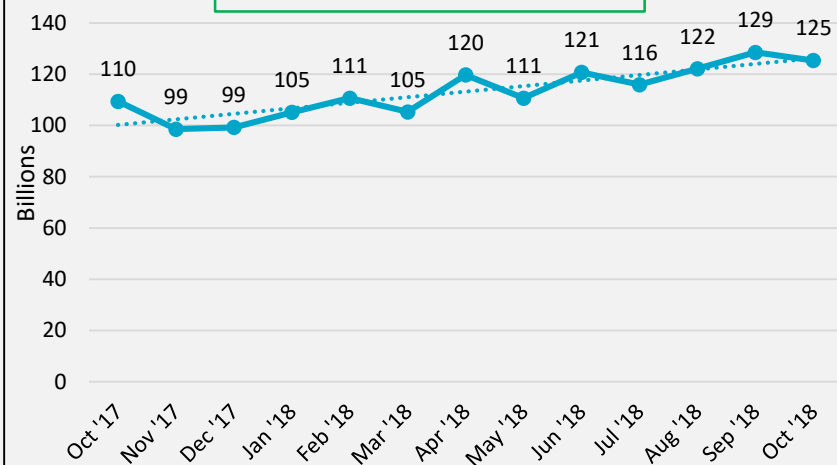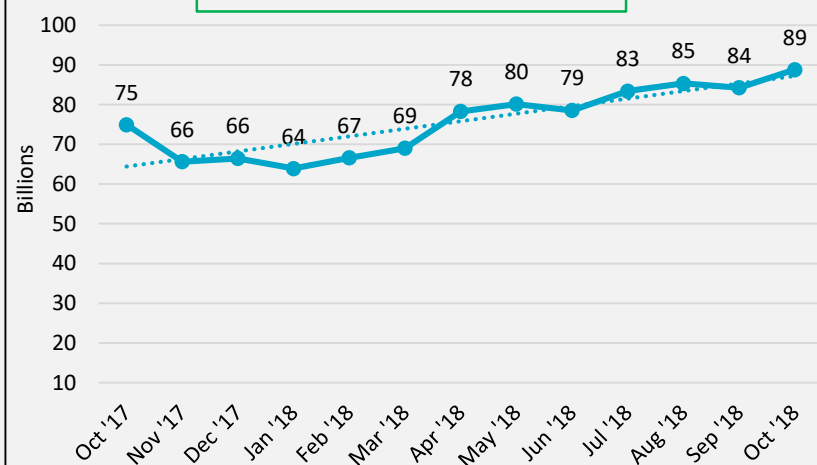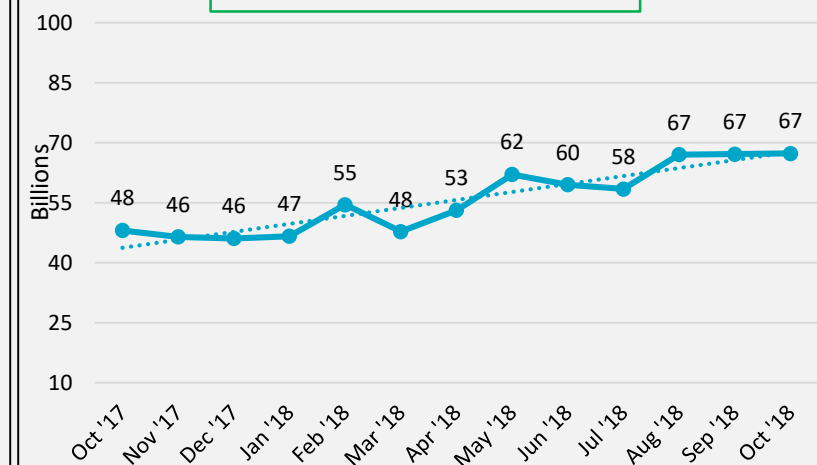
TRENDS

Domestic Service Availability

99.994%

Oct '18 Service Availability
(SLA 99.970%)

Domestic Service Availability trend chart (Oct-17 to Oct-18):
- Oct-17: 99.990%
- Nov-17: 99.999%
- Dec-17: 99.996%
- Jan-18: 99.995%
- Feb-18: 99.986%
- Mar-18: 99.935%
- Apr-18: 99.998%
- May-18: 100.000%
- Jun-18: 99.989%
- Jul-18: 99.999%
- Aug-18: 99.999%
- Sep-18: 99.976%
- Oct-18: 99.994%
- SLA line: 99.970%
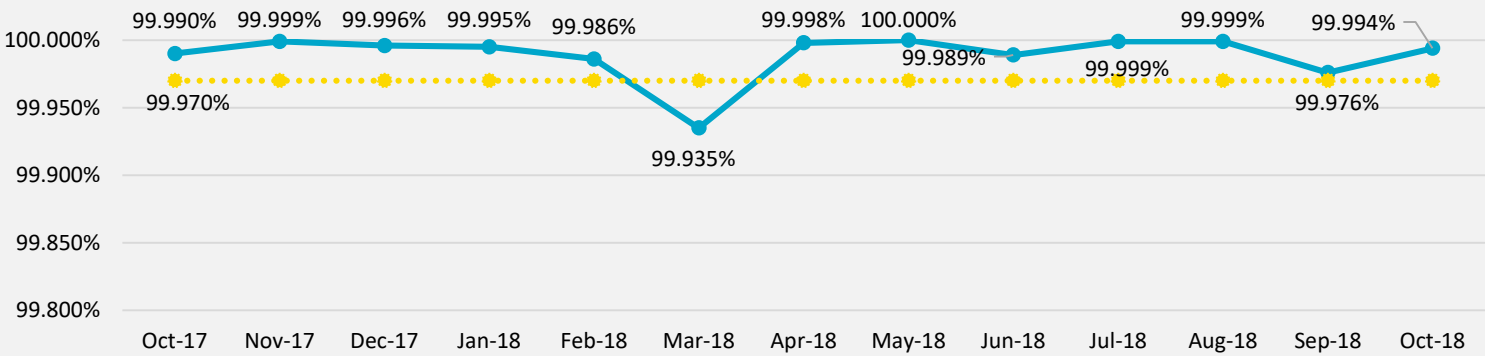
Top Customer Availability

99.998%

Oct '18 Top Customer Availability
(calculated based on minutes)

Top Customer Availability trend chart (Oct-17 to Oct-18):
- Oct-17: 99.999%
- Nov-17: 99.999%
- Dec-17: 99.999%
- Jan-18: 99.999%
- Feb-18: 99.999%
- Mar-18: 99.999%
- Apr-18: 99.999%
- May-18: 99.997%
- Jun-18: 99.998%
- Jul-18: 99.999%
- Aug-18: 99.997%
- Sep-18: 100.000%
- Oct-18: 99.998%
- SLA line: 99.970%
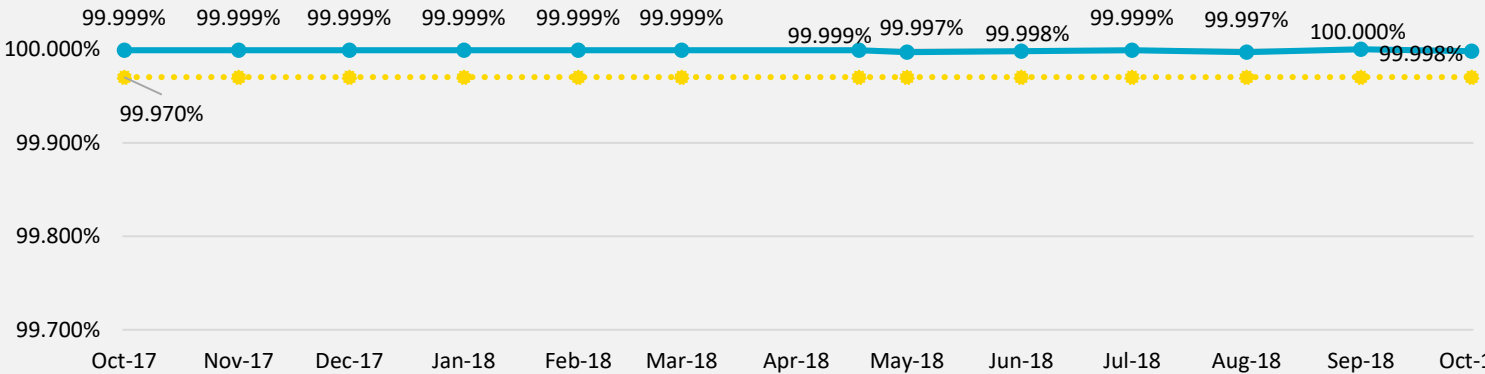
International Service Availability

99.988%

Oct '18 Service Availability Int'l
(SLA 99.970%)

International Service Availability trend chart (Oct-17 to Oct-18):
- Oct-17: 99.983%
- Nov-17: 99.993%
- Dec-17: 99.985%
- Jan-18: 99.985%
- Feb-18: 99.986%
- Mar-18: 99.895%
- Apr-18: 99.977%
- May-18: 99.998%
- Jun-18: 99.998%
- Jul-18: 99.998%
- Aug-18: 99.999%
- Sep-18: 99.999%
- Oct-18: 99.988%
- SLA line: 99.970%
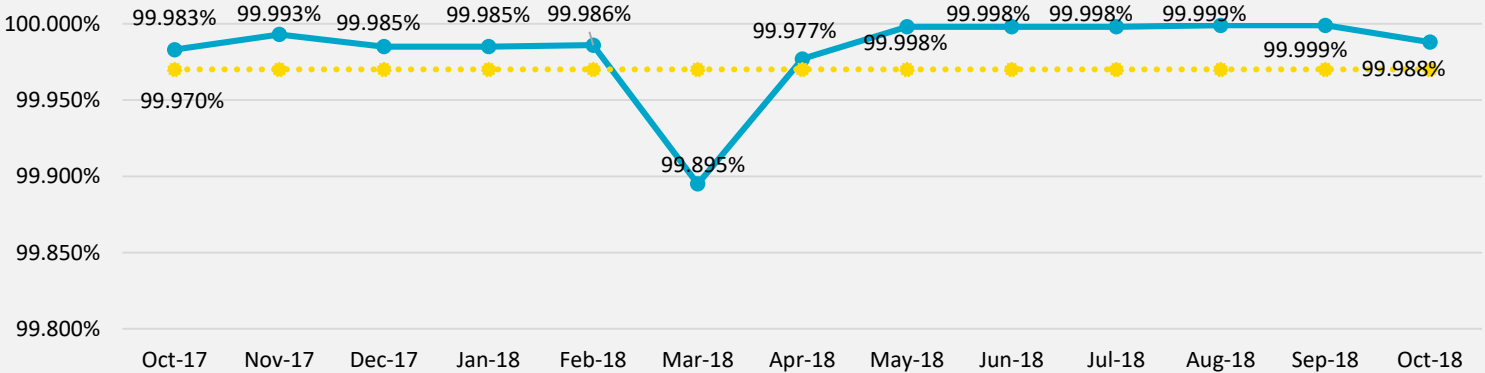
KEY MESSAGE

- Except Mar 2018, GT is meeting internal goal of 99.970% availability throughout the year.

Infrastructure Capacity Metrics

Executive summary slide; Data center metrics – global vs domestic; Network, storage and server metrics; Device counts; Systems and telephony; Virtualization; EUC (end user computing); Common services and Database systems.
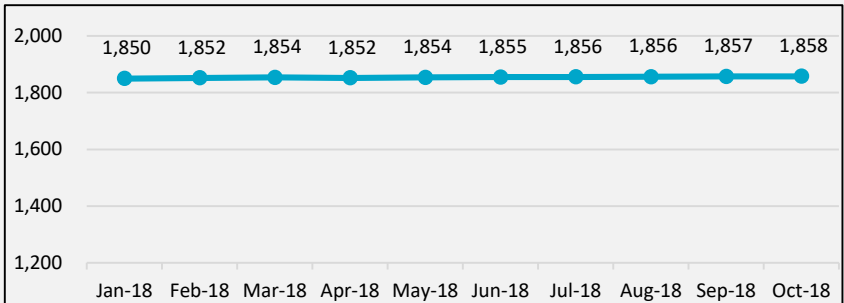
Infrastructure – Data Center Metrics

Corporate Average Data Efficiency (CADE)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	9	9	2	6	2	3	9	9	9

CADE Index

1-3 Red　　　　　　　　　　4-7 Yellow　　　　　　　　　　8-10 Green
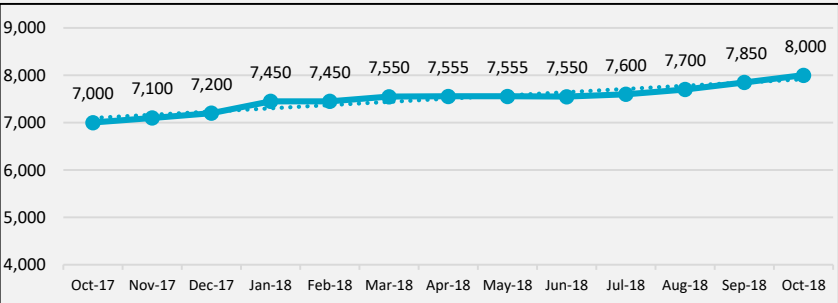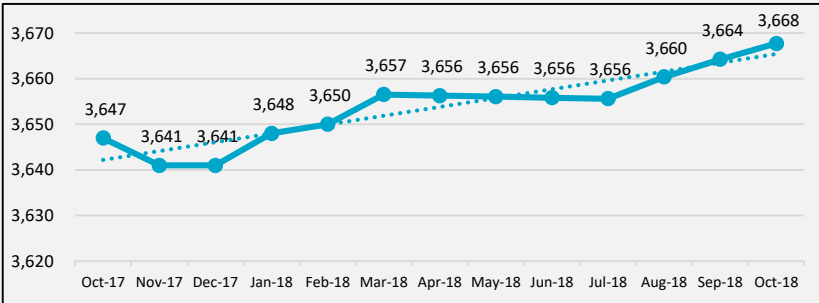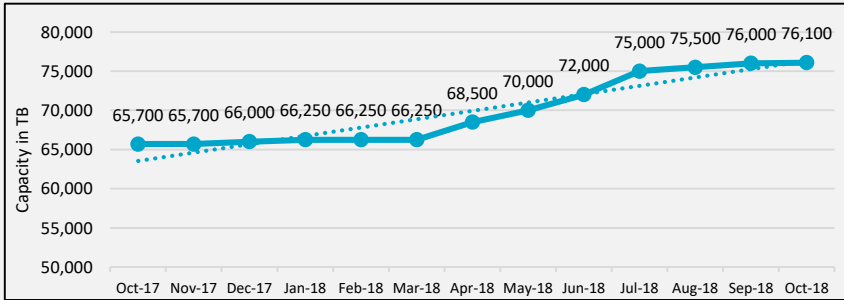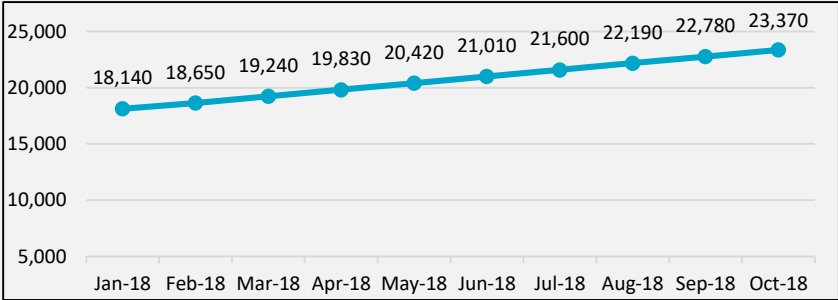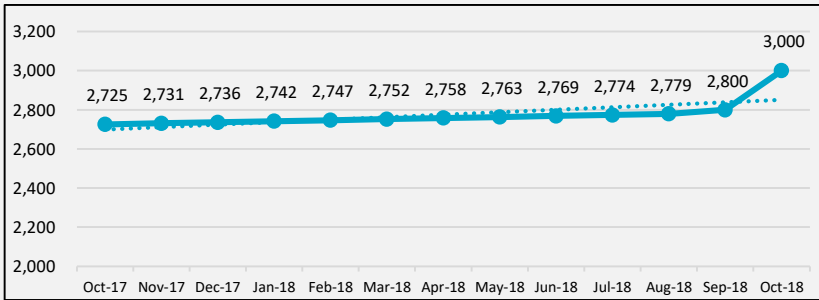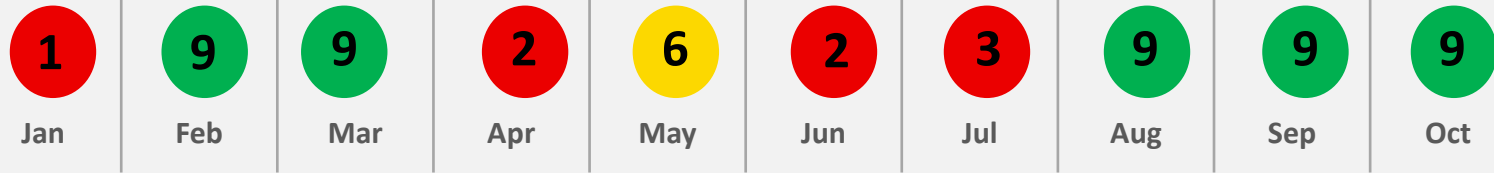
Data center floor usage (%) Over Time

65% 66% 62% 60% 63% 65% 62% 62% 62% 61%

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18
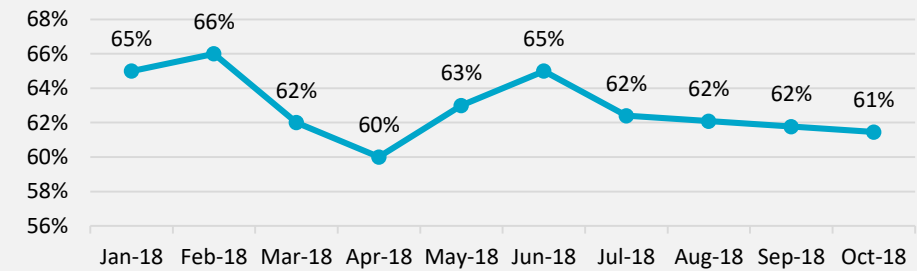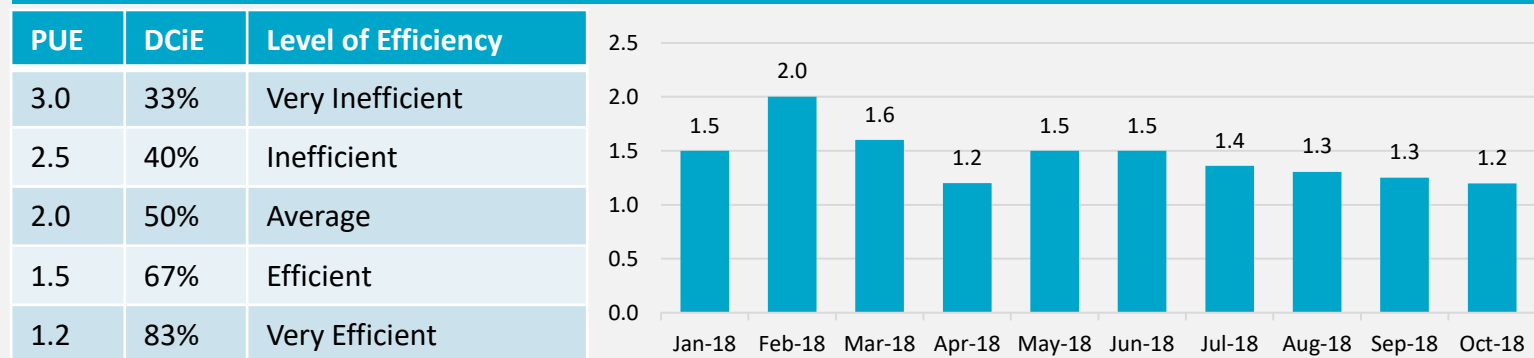
Significant Data Center Projects/Initiatives

Oct '18
- Local data center capacity increased by 5%
- Addition of switch over service to DC2

Nov '18
- Global data center setup plan approved
- Switch over capabilities will be enhanced

Datacenter Power Usage Effectiveness (PUE)

PUE	DCiE	Level of Efficiency
3.0	33%	Very Inefficient
2.5	40%	Inefficient
2.0	50%	Average
1.5	67%	Efficient
1.2	83%	Very Efficient

1.5 2.0 1.6 1.2 1.5 1.5 1.4 1.3 1.3 1.2

Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18
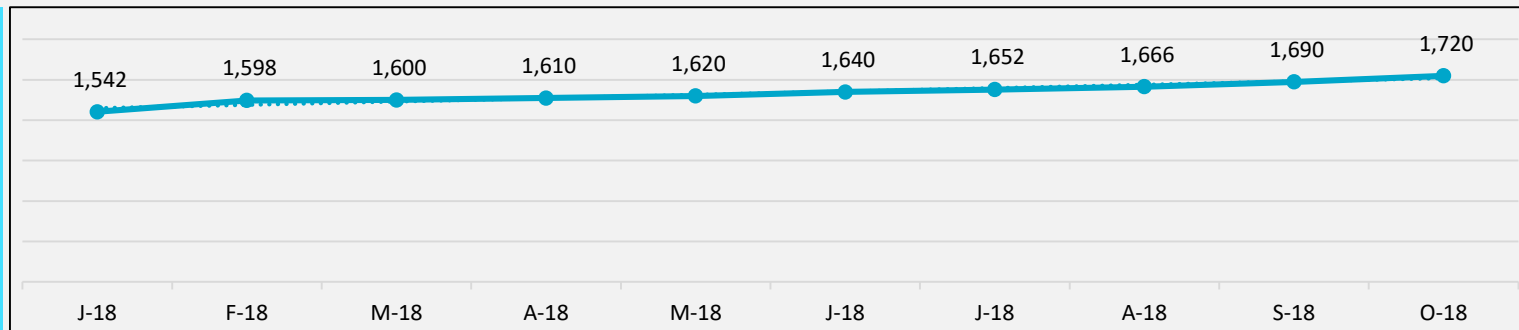
Key Message

- A facility used for housing a large amount of computer and communications equipment maintained by an organization for the purpose of handling the data necessary for its operations.

- Corporate average data efficiency (CADE)
  - Corporate average data efficiency (CADE) measures data center efficiency across the corporate footprint.

- Data center floor usage %
  - Data center floor space utilization percentage.

- Average data center rack utilization
  - Percentage of rack space in use.

- Datacenter power usage effectiveness (PUE)
  - PUE is calculated by dividing the total power usage of a data center by the power usage of IT equipment such as computer, storage, network equipment, switches, monitors, and workstations to control the data center.

INFRASTRUCTURE – DATA CENTER METRICS

DOMESTIC DATA CENTER

POWER CONSUMPTION (AVG. KW)

J-18	F-18	M-18	A-18	M-18	J-18	J-18	A-18	S-18	O-18
1,542	1,598	1,600	1,610	1,620	1,640	1,652	1,666	1,690	1,720

1,720

Avg. KW for Oct 2018
(11.5% increase over Jan-2018)

RACK UNIT SPACE

Used RU Space | Free RU Space

	J-18	F-18	M-18	A-18	M-18	J-18	J-18	A-18	S-18	O-18
Free RU Space	7,025	7,001	6,981	7,008	6,887	6,951	6,991	7,068	7,068	7,068
Used RU Space	3,555	3,579	3,599	3,572	3,693	3,629	3,589	3,512	3,512	3,512
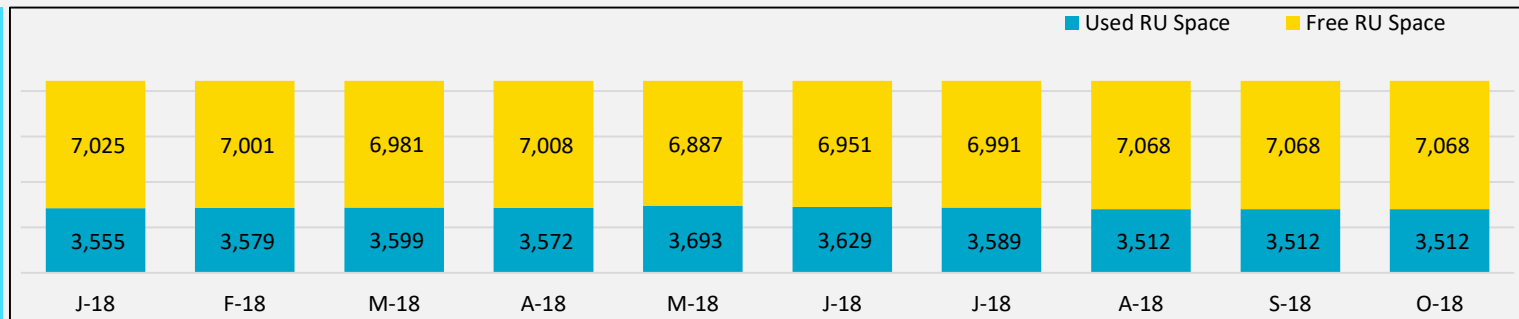
Total RU Space:

10,580

(33.2% is used as of Oct 2018)

TOTAL SQFT

Square Sq Ft Used | Square Sq Ft Available

	J-18	F-18	M-18	A-18	M-18	J-18	J-18	A-18	S-18	O-18
Square Sq Ft Available	5,588	5,588	5,588	5,588	5,588	5,495	5,352	5,352	5,352	5,352
Square Sq Ft Used	4,212	4,212	4,212	4,212	4,212	4,305	4,448	4,448	4,448	4,448
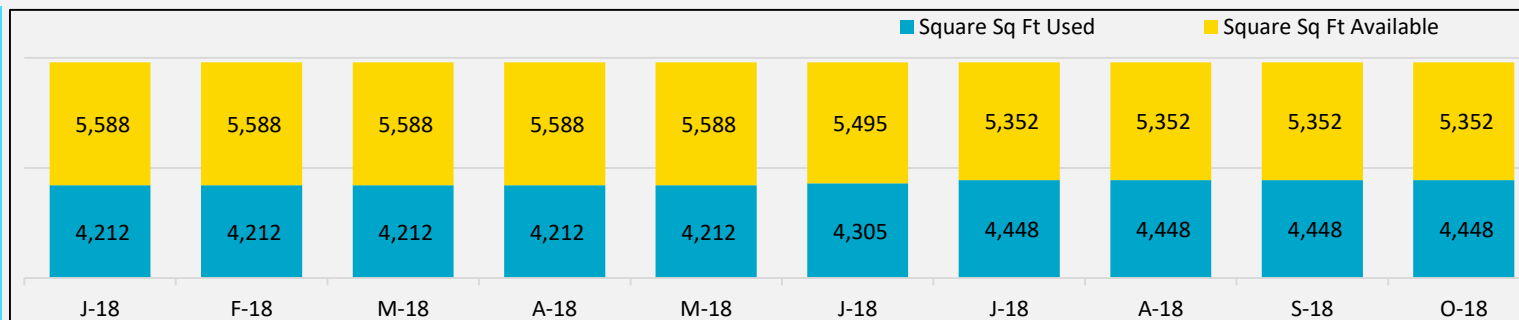
Total Usable SQFT:

9,800

(45.4% is used as of Oct 2018)

KEY MESSAGE

▪ Reason for power consumption increase: There have been lot of upgrades in the devices. As each device can range in the amount of power consumption. The new devices & the upgraded ones ramp up power consumption.

▪ Scrutiny of optimal devices are in process and will be completed by year end.
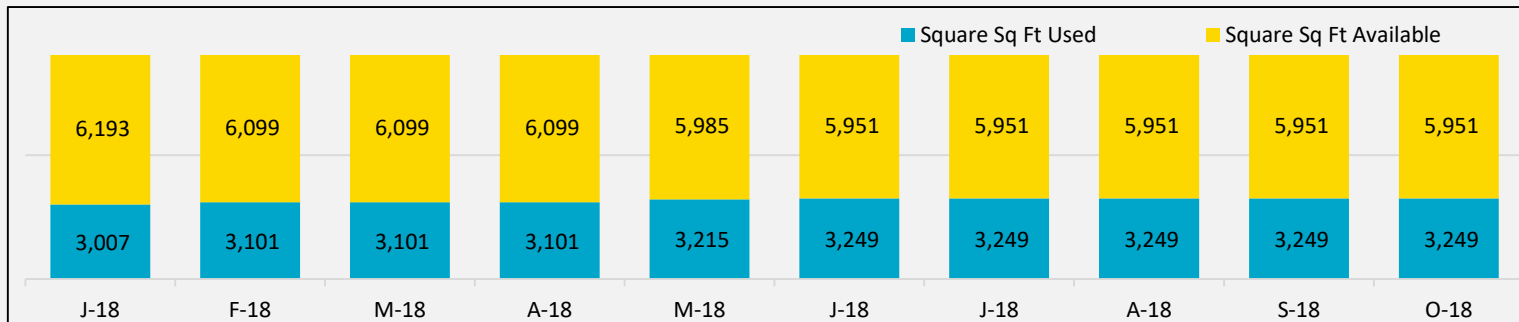
INFRASTRUCTURE – DATA CENTER METRICS

GLOBAL DATA CENTER

POWER CONSUMPTION (AVG. KW)

Line chart values: 1,200 (J-18), 1,210 (F-18), 1,220 (M-18), 1,220 (A-18), 1,225 (M-18), 1,232 (J-18), 1,232 (J-18), 1,232 (A-18), 1,245 (S-18), 1,250 (O-18)

1,250

Avg. KW for Oct 2018
(4.2% increase over Jan-2018)

RACK UNIT SPACE

Used RU Space / Free RU Space

Month	Free RU Space	Used RU Space
J-18	5,589	4,491
F-18	5,690	4,390
M-18	5,639	4,441
A-18	5,589	4,491
M-18	5,562	4,518
J-18	5,546	4,534
J-18	5,602	4,478
A-18	5,576	4,505
S-18	5,587	4,513
O-18	5,587	4,513
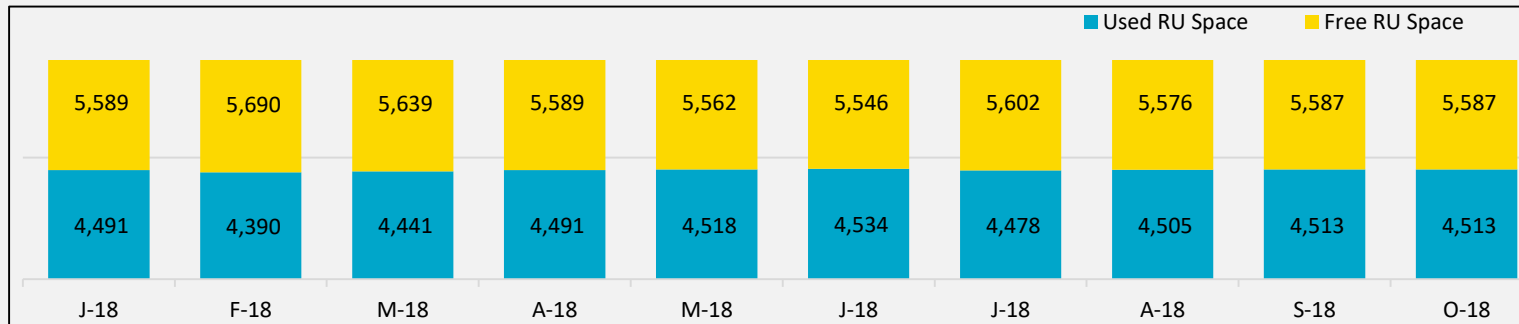
Total RU Space:

10,100

(44.69% is used as of Oct 2018)

TOTAL SQFT

Square Sq Ft Used / Square Sq Ft Available

Month	Square Sq Ft Available	Square Sq Ft Used
J-18	6,193	3,007
F-18	6,099	3,101
M-18	6,099	3,101
A-18	6,099	3,101
M-18	5,985	3,215
J-18	5,951	3,249
J-18	5,951	3,249
A-18	5,951	3,249
S-18	5,951	3,249
O-18	5,951	3,249

Total Usable SQFT:

9,200

(35.32% is used as of Oct 2018)

KEY MESSAGE

- Reason for power consumption increase: There have been lot of upgrades in the devices. As each device can range in the amount of power consumption. The new devices & the upgraded ones ramp up power consumption.

- Scrutiny of optimal devices are in process and will be completed by year end.

NETWORK BANDWIDTH USED

99.00%

Oct'18
(Target : 95%)

Network Bandwidth Used bar chart (Jan-18 to Oct-18):
- Jan-18: 80%
- Feb-18: 90%
- Mar-18: 92%
- Apr-18: 96%
- May-18: 99%
- Jun-18: 95%
- Jul-18: 96%
- Aug-18: 99%
- Sep-18: 99%
- Oct-18: 99%

TI&S PORTFOLIO

Top Inflight Initiatives (by $**)

1	US Network Dev Project	$3.8 M	🟢
2	Global Standardization Project	$3.2 M	🟢
3	Product Zonal	$1.7 M	🔴
4	BD-X Launch	$1.7 M	🟢
5	Scoring Upgradation	$1.5 M	🟡
6	Global Infrastructure Build	$1.2 M	🟡
7	India Analytics DevX	$1.1 M	🟢

METRICS	SEP '18	OCT '18	TREND
Average Time to fix connectivity problems (mins) (Target: 50 mins)	80	72	Trend: Jan-18: 50, Feb-18: 100, Mar-18: 30, Apr-18: 45, May-18: 60, Jun-18: 80, Jul-18: 70, Aug-18: 75, Sep-18: 80, Oct-18: 72 (target line at 50)
Average international packet loss percentage (Target: 3%)	2%	2%	Trend: Jan-18: 5%, Feb-18: 3%, Mar-18: 4%, Apr-18: 2%, May-18: 6%, Jun-18: 6%, Jul-18: 3%, Aug-18: 4%, Sep-18: 2%, Oct-18: 2% (target line at 3%)
Average national packet loss percentage (Target: 2%)	3%	3%	Trend: Jan-18: 4%, Feb-18: 3%, Mar-18: 4%, Apr-18: 2%, May-18: 2%, Jun-18: 3%, Jul-18: 2%, Aug-18: 2%, Sep-18: 3%, Oct-18: 3% (target line at 2%)

KEY MESSAGE

➢ A computer network is a data communications system which interconnects computer systems at various different sites. It composes of any combination of LANs, or WANs.

➢ % of network bandwidth used
  ▪ Gap between actual network usage and maximum capacity of the network.

➢ Average Time to fix connectivity problems
  ▪ Average time, in hours, in your corporation to fix network connectivity problems

➢ Average international packet loss %
  ▪ Average international packet loss percentage.

➢ Average national packet loss %
  ▪ Average national packet loss percentage.

Network Devices (Count)

Oct 2018
1,858
0.4% increase over Jan 2018

Network Devices chart:
Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
1,850	1,852	1,854	1,852	1,854	1,855	1,856	1,856	1,857	1,858
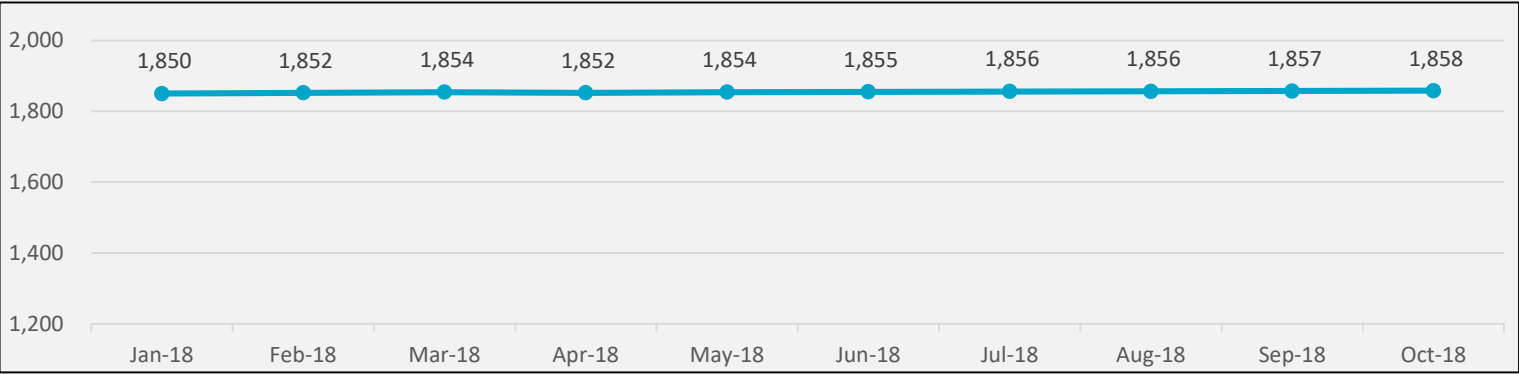
Storage Capacity (Terabytes)

Oct 2018
76,100TB
16% increase over Oct 2017

Storage Capacity chart (Capacity in TB):
Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
65,700	65,700	66,000	66,250	66,250	66,250	68,500	70,000	72,000	75,000	75,500	76,000	76,100
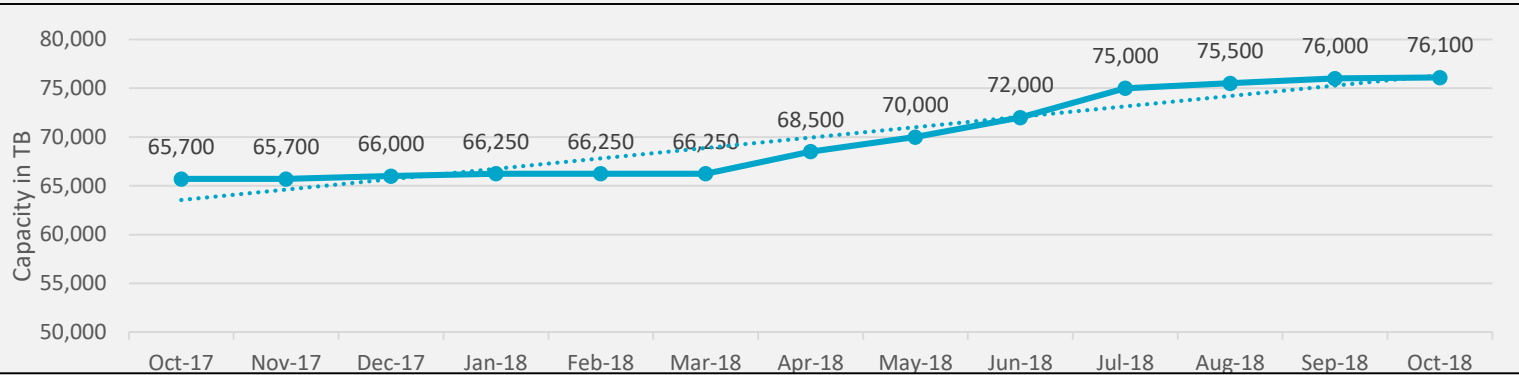
Servers Count (Physical & Virtual)

Oct 2018
8,000
14% increase over Oct 2017

Servers Count chart:
Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
7,000	7,100	7,200	7,450	7,450	7,550	7,555	7,555	7,550	7,600	7,700	7,850	8,000
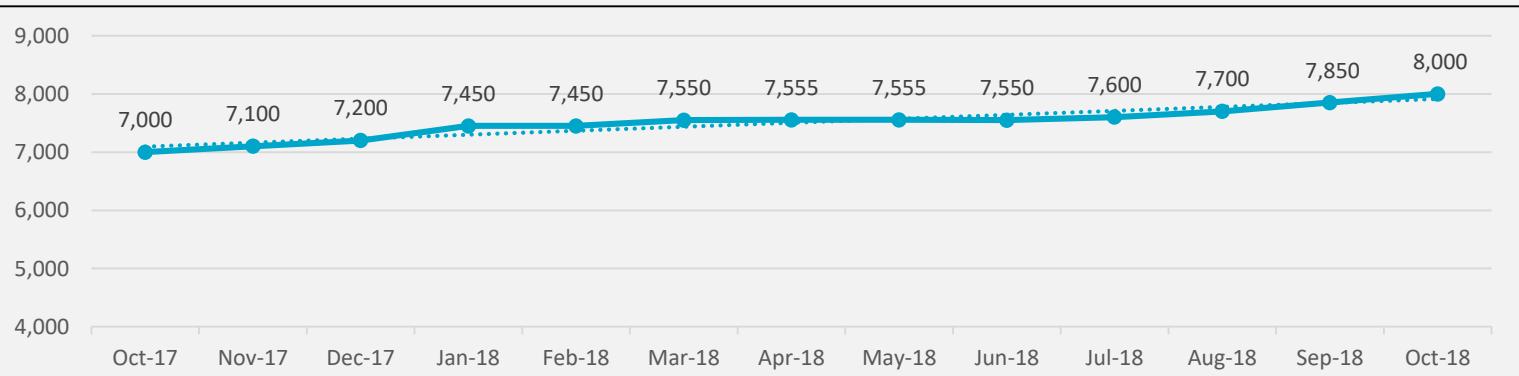
KEY MESSAGE

➢ **Storage**
- Total storage capacity increased by 100 TB compared to last month.
  - Tape – 100 TB increased & ESS – is under review

➢ **Server & Virtualization**
- Server count increased by 250 compared to last month.
  - ES server count increased by 120
  - OEL counts increased by 130

➢ **Network**
- Total count for network devices increased by 1 from the month of September

Network Devices ❖ October Count: 1,858

Pie chart:
- WAN, 500, 27%
- Wireless Devices, 504, 27%
- DNS, 100, 5%
- Firewall, 154, 8%
- Load Balancers, 100, 6%
- Data Center Routers & Switches, 500, 27%

NETWORK, STORAGE & SERVER

STORAGE ASSET EFFICIENCY

97%

Oct'18
Increase of 1%
over last month

Legend bar chart labels (Storage Asset Efficiency):
- Excellent
- **Very Good (Goal)**
- Good
- Average
- Poor
- Very Poor
- Lowest Possible

Storage Asset Efficiency trend (monthly bar chart):

Month	Value
Jan-18	90%
Feb-18	92%
Mar-18	91%
Apr-18	93%
May-18	95%
Jun-18	96%
Jul-18	96%
Aug-18	96%
Sep-18	95%
Oct-18	97%

KEY MESSAGE

➢ The process of storing information in a computer memory or on a magnetic tape or disk

➢ % of (assigned) disk space quota used
- Percentage of assigned disk space quota used relative to the total assigned disk space quota.

➢ Storage Asset Efficiency %
- Storage asset efficiency percentage. Usage percentage of the current capabilities divided by a reference capability.

➢ # of FTE per size of storage under management
- of Full time equivalent employees (FTE) per Gb or Tb of storage under management

KPI	SEP '18	OCT '18	TREND
Percentage of (assigned) disk space quota used	98%	98%	Jan-18: 90%, Feb-18: 85%, Mar-18: 98%, Apr-18: 99%, May-18: 99%, Jun-18: 98%, Jul-18: 99%, Aug-18: 99%, Sep-18: 98%, Oct-18: 98%
# of FTE per size of storage under management	3.6	3.8	Jan-18: 4, Feb-18: 3, Mar-18: 3.8, Apr-18: 3.6, May-18: 3.6, Jun-18: 4.2, Jul-18: 3.6, Aug-18: 3.6, Sep-18: 3.6, Oct-18: 3.8

SYSTEMS METRICS

SYSTEM METRICS

	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Dead servers (%)	10%	8%	10%	12%	8%	5%	6%	6%	7%	6%
Average CPU utilization (%)	90%	88%	76%	85%	90%	92%	90%	91%	91%	91%
Average memory utilization (%)	75%	85%	82%	80%	81%	82%	83%	84%	85%	85%
Disk space used (%)	70%	72%	75%	70%	78%	77%	82%	82%	83%	83%
Server to system administration (%)	60%	60%	62%	61%	60%	62%	62%	63%	63%	64%

KEY MESSAGE

- **% of "dead" servers**
  - Percentage of "dead" servers i.e. servers that are not used based on for example hardly any CPU utilization.

- **Server to System Administration Ratio**
  - Server to System Administration Ratio

- **% of disk space used**
  - Percentage of disk space used.

- **Average % of memory utilization**
  - Average percentage of utilization of memory capacity of system within measurement period.

- **Average % of CPU utilization**
  - Average percentage of utilization of CPU of system during the measurement period.

TELEPHONY SUMMARY

FTEs ON TELEPHONY PROJECTS

Jan-18: 5
Feb-18: 6
Mar-18: 7
Apr-18: 6
May-18: 8
Jun-18: 8
Jul-18: 9
Aug-18: 9
Sep-18: 6
Oct-18: 7

MEAN OPINION SCORE (MOS)

Jan-18: 3.5
Feb-18: 3.6
Mar-18: 3.6
Apr-18: 3.8
May-18: 3.8
Jun-18: 4.0
Jul-18: 4.1
Aug-18: 4.0
Sep-18: 4.2
Oct-18: 4.4

DROPPED % TELEPHONE CALLS (DCR)

Jan-18: 3%
Feb-18: 4%
Mar-18: 6%
Apr-18: 5%
May-18: 4%
Jun-18: 4%
Jul-18: 4%
Aug-18: 4%
Sep-18: 6%
Oct-18: 3%
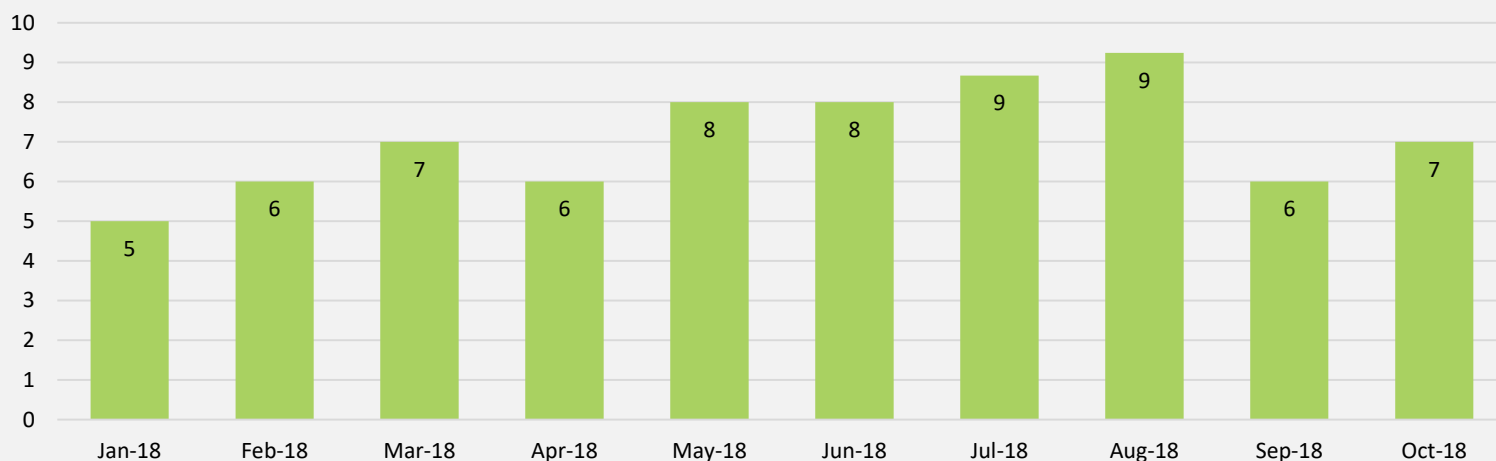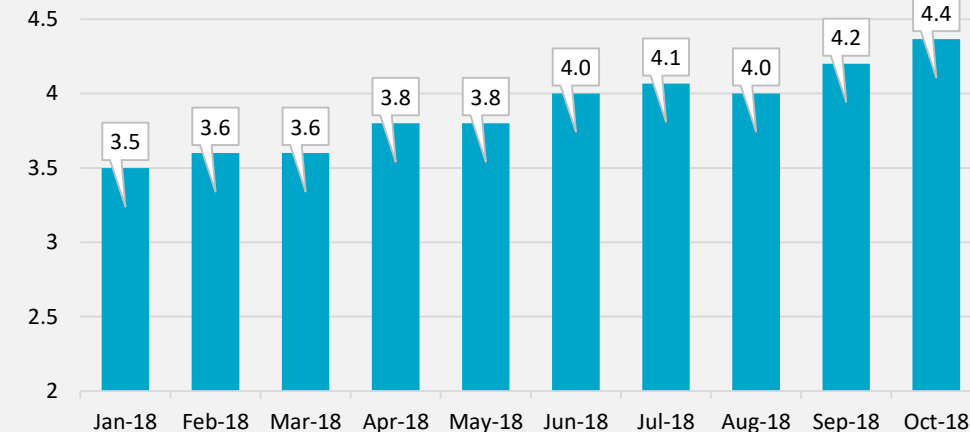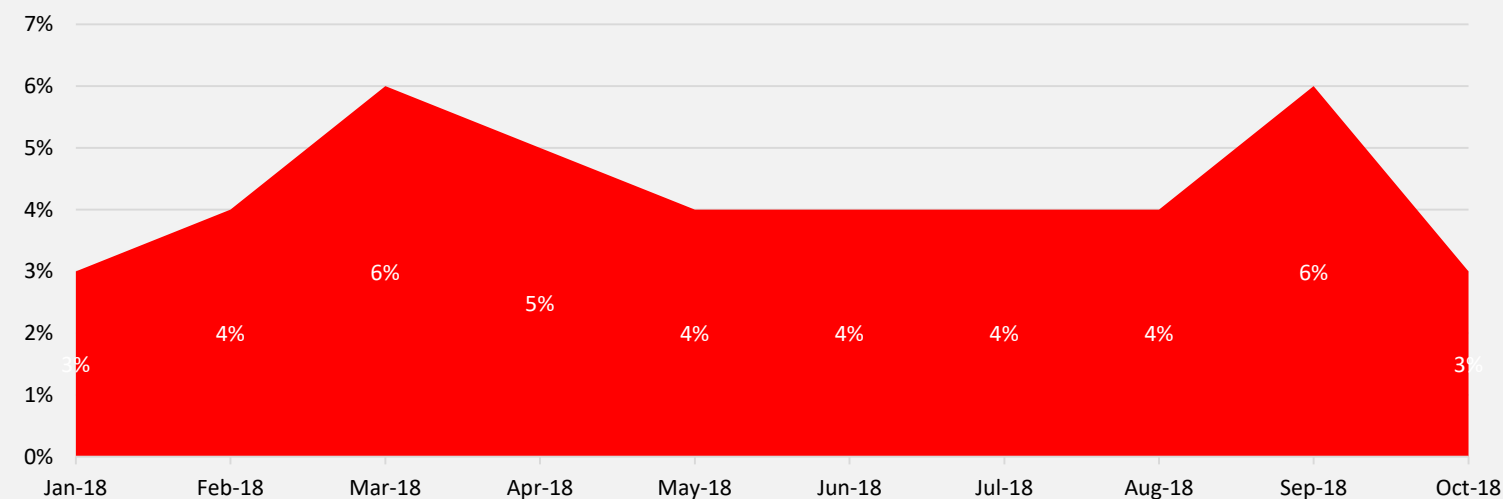
KEY MESSAGE

- Mean Opinion Score (MOS)
  In multimedia (audio, voice telephony, or video) especially when codecs are used to compress the bandwidth requirement (for example, of a digitized voice connection from the standard 64 kilobit/second PCM modulation), the Mean Opinion Score (MOS) provides a numerical indication of the perceived quality of received media after compression and/or transmission. The MOS is expressed as a single number in the range 1 to 5, where 1 is lowest perceived quality, and 5 is the highest perceived quality. (MOS tests for voice are specified by ITU-T recommendation P.800)

- % of dropped telephone calls (DCR)
  Percentage of telephone calls that were not regularly ended due to technical failure, relative to all telephone calls within the measurement period.
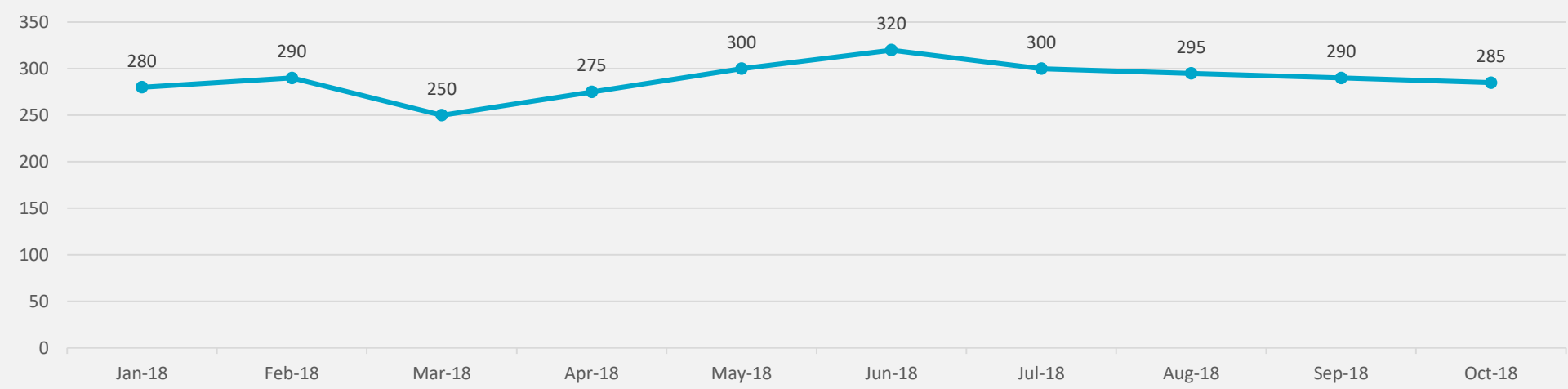
Domestic – EUC Counts

	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Total	15,050	15,550	16,050	16,550	17,050	17,550	18,050	18,550	19,050	19,550
Monitors	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500
Laptop	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
VDI	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
MAC Book	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Android Phones	50	50	50	50	50	50	50	50	50	50
Apple phones	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000

International – EUC Counts
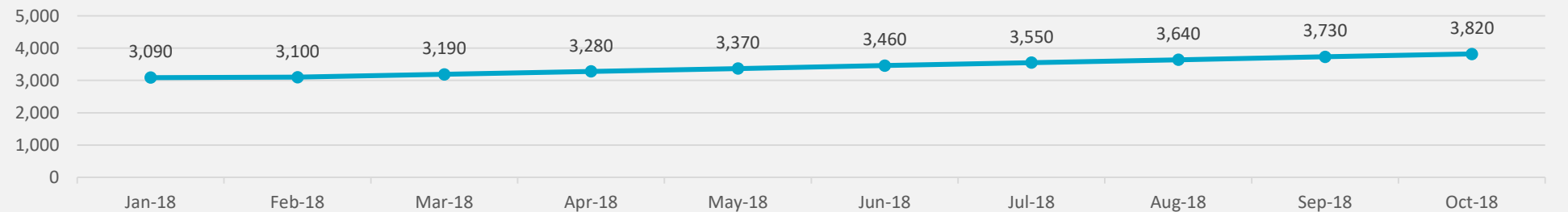
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Total	3,090	3,100	3,190	3,280	3,370	3,460	3,550	3,640	3,730	3,820
Monitors	490	500	550	600	650	700	750	800	850	900
Laptop	2,500	2,500	2,520	2,540	2,560	2,580	2,600	2,620	2,640	2,660
MAC Book	100	100	120	140	160	180	200	220	240	260

Key Message

- Domestic: Total Device Count increased by 500 at 19,550.
  - Monitors – 500 increased
  - Apple phones – No change
  - VDI – No change
  - Laptop – No change
  - Mac Book - No change
  - Android phones – No change

- APAC, Brazil and India migrated to domestic images.

- International:
  - Philippines – 260 EP
  - Guatemala – 500 EP
  - El Salvador – 600 EP
  - Honduras - 999 EP
  - Costa Rica – 777 EP
  - Nicaragua – 800 EP
  - Dominican Republic – 651 EP
  - Mexico – 3,999 EP
  - Columbia – 3,384 EP
  - Chile – 7,755 EP

COMMON SERVICES

Common Services Count

Oct 2018

3,668

0.6% increase over Oct 2017

KEY MESSAGE

- Common Services count increase by 4 to 3,668
  - Internet services counts increased by 4.
  - Active Directory count is same as last month
  - Web access count is same as last month

	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Total	**3,641**	**3,647**	**3,641**	**3,641**	**3,648**	**3,650**	**3,657**	**3,656**	**3,656**	**3,656**	**3,656**	**3,660**	**3,664**	**3,668**
Active Directory	160	166	160	160	160	162	161	160	160	160	160	159	159	159
SX Directory	101	101	101	101	101	101	101	101	101	101	101	101	101	101
DX WebAgent	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Direct Access	100	100	100	100	100	100	100	100	100	100	100	100	100	100
NetIQ	360	360	360	360	360	360	360	360	360	360	360	360	360	360
Internet Services	600	600	600	600	600	600	600	600	600	600	600	600	604	608
Key Mgmt.	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Transformation	43	43	43	43	50	50	58	58	58	58	58	63	63	63
Email	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Voice	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Digital Certificates	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Web Access	122	122	122	122	122	122	122	122	122	122	122	122	122	122
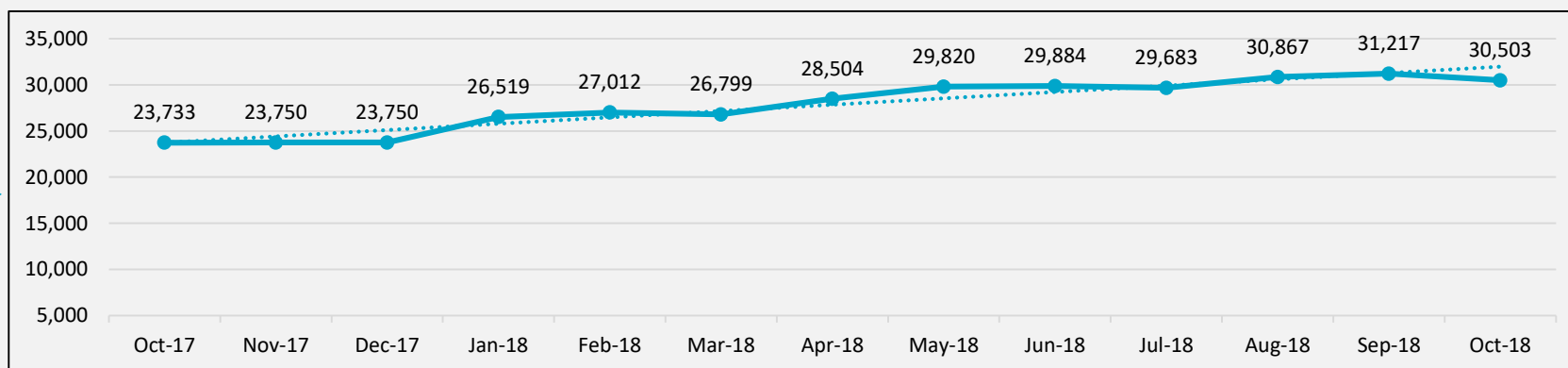
Workforce Metrics

Resource actual efforts as per time reporting; Growth overtime with type breakdown.

RESOURCE ACTUALS – TIME REPORTING

	TOTAL FTEs CURRENT MONTH	TOTAL FTEs PREVIOUS MONTH	MONTHLY CHANGE %	EFFORT (%) CURRENT MONTH
OPERATIONS	1,200	1,180	▲ 1.7%	51.1%
CORE INFRASTRUCTURE	800	820	▼ -2.4%	34.0%
ADMINISTRATIVE	250	220	▲ 13.6%	10.6%
OTHER SERVICES	100	80	▲ 25.0%	4.3%
	2,350	2,300	▲ 2.2%	100.0%

▲ Increment ▼ Decrement

KEY MESSAGE

- Monthly change is vs September.
- 1 Full Time Equivalent (FTE) is estimated at 40 hours/week
- TI&S has to focus more on core infrastructure activities to enhance the core capabilities

TOP 10 STANDARD TASKS BY EFFORT HOURS

** Outliers have been removed (less than 30hrs) from the analysis to avoid skewness
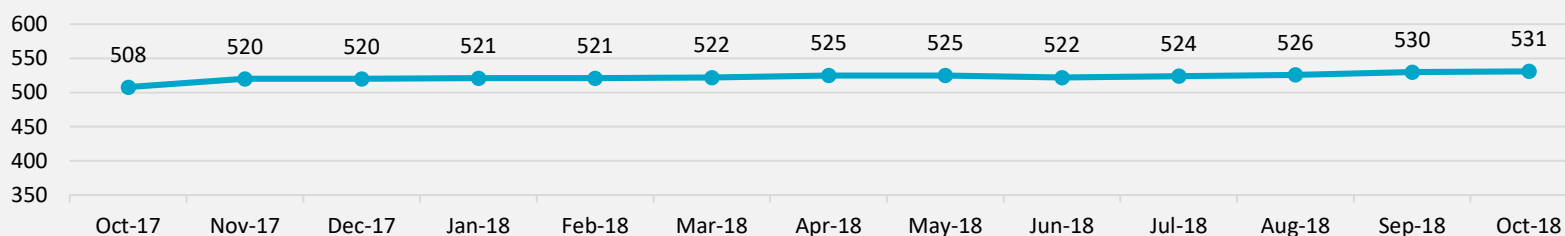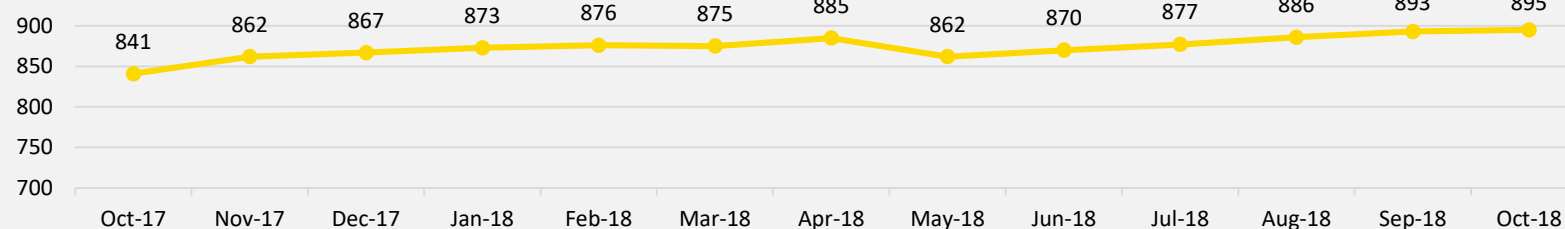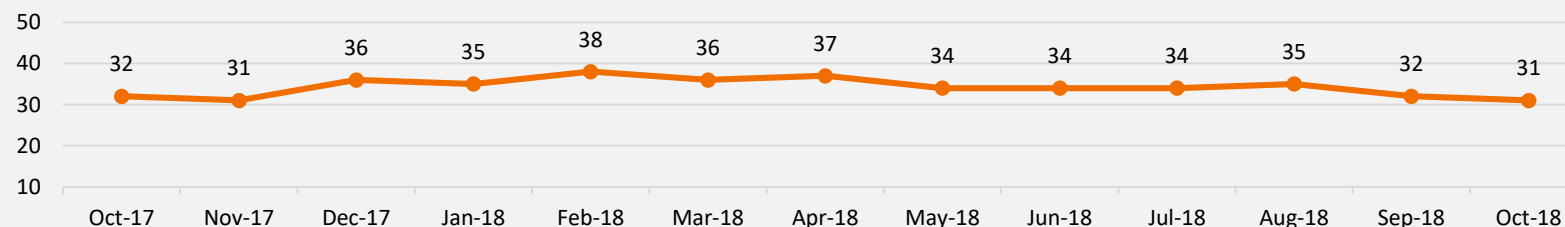
Compliance & Training Metrics

Global risk compliance- archer findings; Global risk security training compliance.

GLOBAL RISK COMPLIANCE - ARCHER FINDINGS

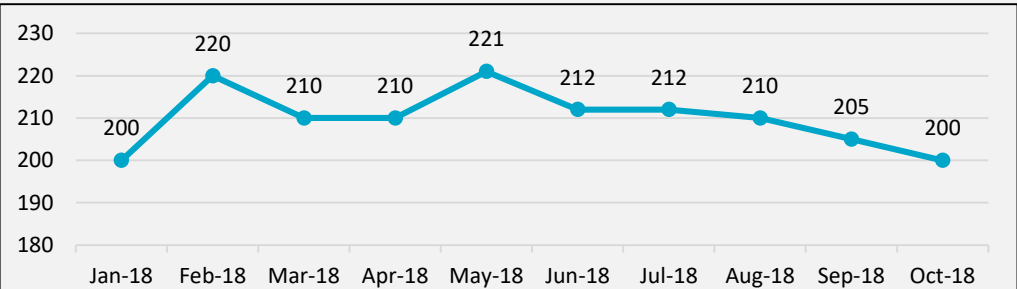## HIGH BACKLOG ITEMS

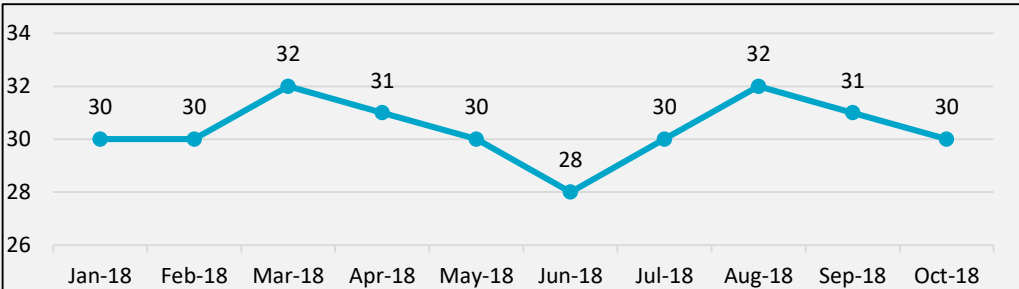## APPLICATION SECURITY BAU PAST DUE - CRITICAL

KEY MESSAGE

- Backlog items are showing an increasing trend

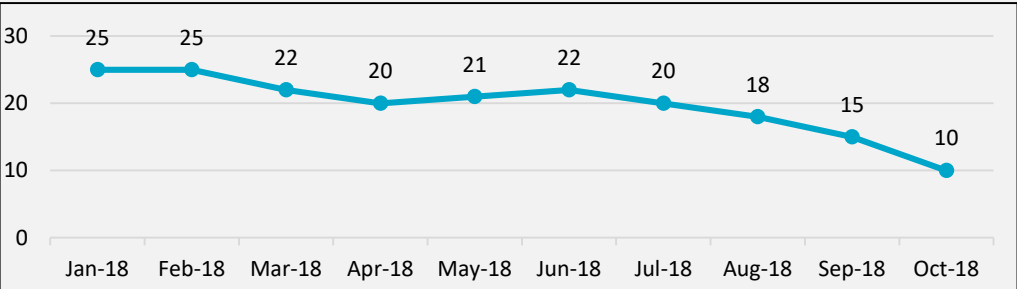- Downward trends in security exceptions
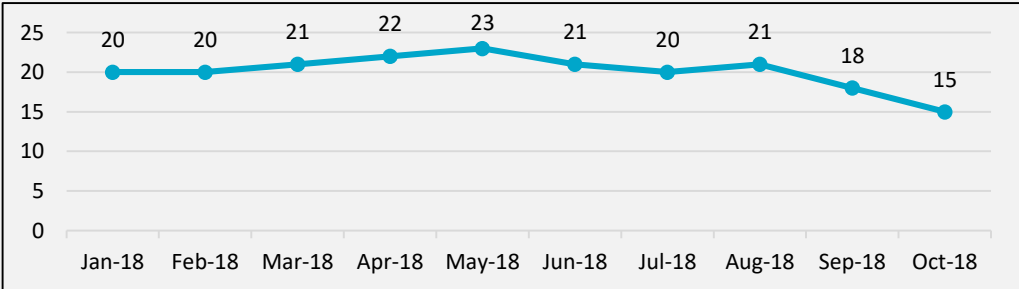
APPLICATION SECURITY BAU PAST DUE - HIGH

APPLICATION SECURITY BAU COMING DUE - 90 DAYS
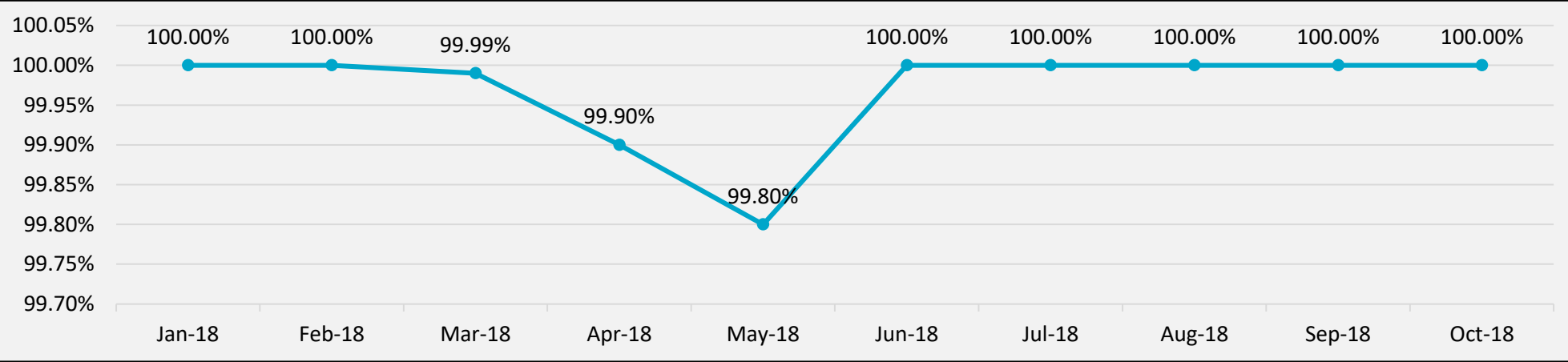

SECURITY EXCEPTIONS - CRITICAL PAST DUE
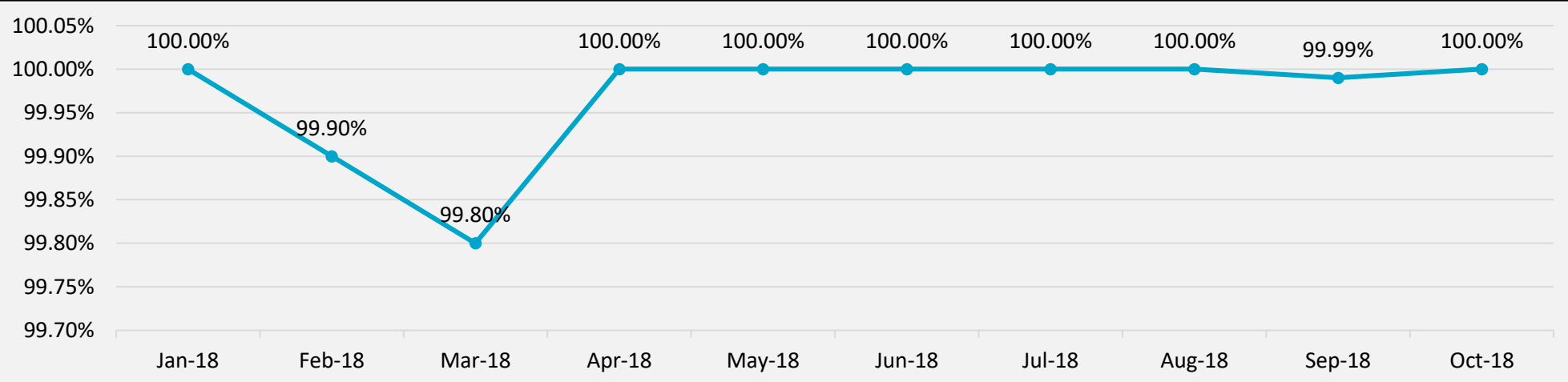

AUDIT FINDINGS – HIGH PAST DUE

CapEx & OpEx Metrics

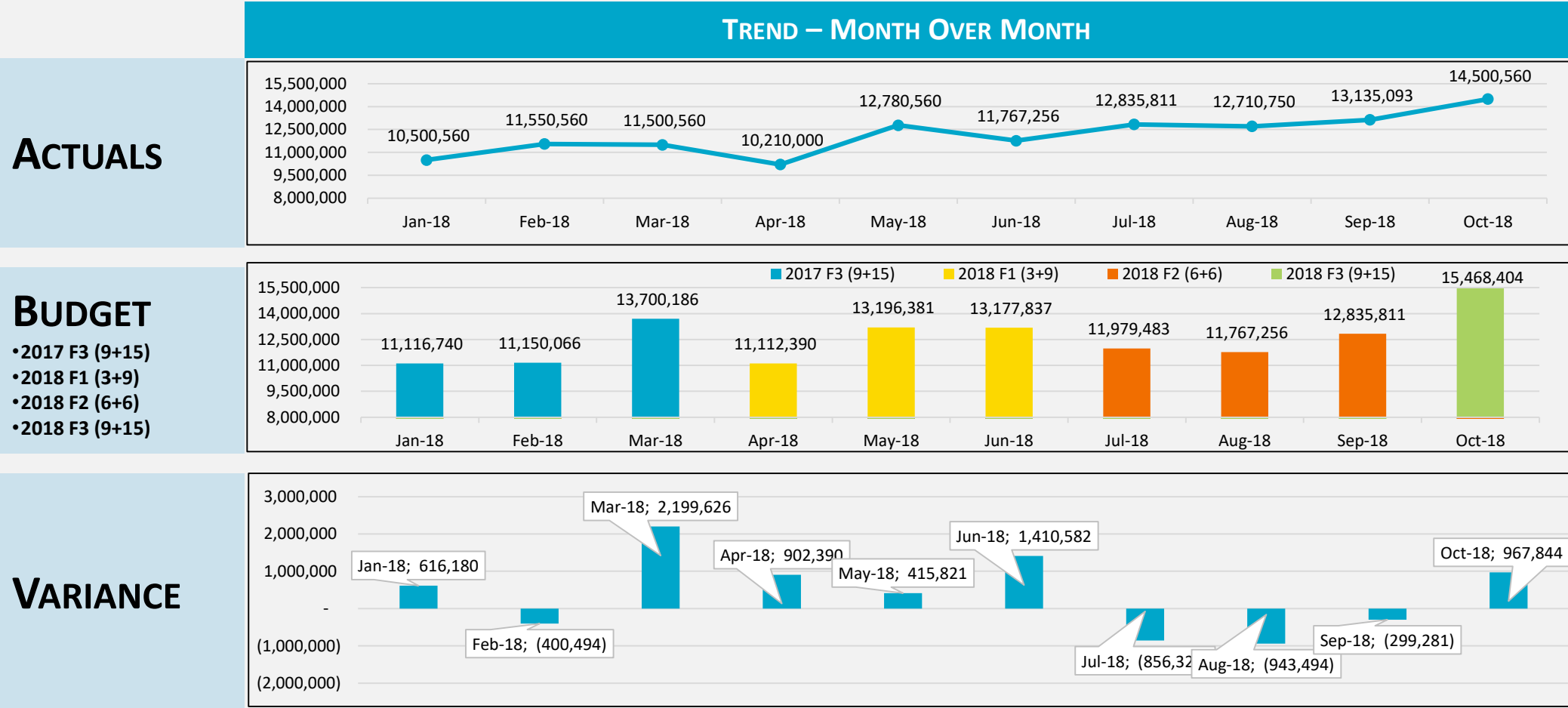CapEx Vs Forecast for the month and year-to-date; Remaining amount to spend for the year.

Top Business Initiatives

Top business initiative complete details.

TOP BUSINESS INITIATIVES

IT APPLICATION STABILITY IMPROVEMENT

OVERALL

SCOPE

SCHEDULE

RESOURCES

RISKS/ ISSUES

OBJECTIVE

Infrastructure refresh road map is a monthly process that reflects the state of our GT infrastructure and support status for global locations. This process was transitioned in the year 2018. In this process, major refresh projects are decided and taken forward with the domain owners to ensure timely completion. Complete forecasting and reporting on a monthly basis is done by data analytics and reporting SME.

STATUS

❖ Data collection begins for 2H2018.
❖ This process will include all latest domestic and international initiatives
❖ Second refresh progress tracker for October 2018 is completed and shared with senior leadership. 50 projects have completed and 20 projects delayed by one month.
❖ Scope moves from green to yellow.
❖ Overall status remains green

COMPLETED ACTIVITIES

❖ Enhanced/Revamped the current processes and procedures with domestic and International domain leads.
❖ Created the 2H2018 data gathering process, timelines & processes
❖ All respective stake holders have been identified & assigned new initiatives
❖ Monthly refresh progress data and summary dashboard got produced and shared with senior leadership/Domain leads.

UPCOMING ACTIVITIES

❖ Engage with 2H2018 data collection process for prod and non prod environment in domestic & International regions.
❖ Periodic review with Domain leads , International and domestic SPOCs

DESCRIPTION	DUE DATE	OWNER	STATUS
❖ Engage with 2H2018 data collection process for prod and non prod environment in domestic & International regions.	12/31/2018	Network team	
❖ Created the 2H2018 data gathering process, timelines and processes flow	10/06/2018	Murli Singh	
❖ Monthly refresh progress data and summary dashboard got produced and shared with senior leadership/Domain leads.	10/05/2018	Murli Singh	
❖ Enhanced/Revamped the current processes and procedures with domestic and International domain leads.	11/31/2018	Capacity Team	