



DoIT Operations Monthly Report

January 2021

Published February 17, 2021

GARTNER BENCHMARKS

Gartner benchmarks have been updated on multiple pages from 2020 values to 2021 values. Gartner has changed their methodology to reporting median values, rather than average values.

Benchmark	2020	2021
Abandonment Rate	5.1 % Mean	4% Median
Cost per Contact	\$17.90 Mean	\$19.80 Median
Cost per Endpoint	\$1078 Mean	\$1193 Median
Endpoints per Technician	499 Mean	212 Median
First Contact Resolution Rate	74% Mean	71% Median
Linux Servers per FTE	268.0 Mean	234.0 Median
Windows Servers per FTE	279.0 Mean	293.0 Median

NOTE: Help Desk Gartner benchmarks are for Medium Environments (65K-170K Handled Contacts per year), Departmental Support Gartner benchmarks are for Small Environments (<13K total computing devices), and Solutions Engineering Gartner benchmarks are using the overall median.

This visualization was created by DoIT in the Department of User Services.





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DoIT OPERATIONS: APPLICATIONS INFRASTRUCTURE SERVICES SERVICE AVAILABILITY

Last 12 months

Service	Target	February %	March %	April %	May %	June %	July %	August %	September %	October %	November %	December %	January %
API Manager	99.00%	100.00	100.00	★89.24	★90.06	★96.18	100.00	100.00	100.00	100.00	★97.38	100.00	100.00
Enterprise Content Management (ECM)	99.00%	★97.56	99.96	100.00	100.00	★97.78	100.00	100.00	★98.76	★73.25	100.00	99.86	100.00
Enterprise Service Bus (ESB)	99.00%	100.00	100.00	100.00	★93.30	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Knowledgebase (KB)	99.00%	100.00	99.95	99.91	100.00	99.90	100.00	100.00	100.00	100.00	100.00	100.00	100.00
My UW	99.00%	99.91	99.78	100.00	100.00	100.00	100.00	100.00	99.58	100.00	100.00	100.00	100.00
NetID Login	99.90%	100.00	99.97	100.00	99.98	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99
Shared Web Hosting	99.00%	★98.72	★83.37	99.93	★97.21	99.33	100.00	100.00	100.00	100.00	100.00	99.96	★98.07
Wisc Web	99.00%	★97.55	★75.41	99.82	100.00	★94.99	99.99	99.91	100.00	★98.69	99.93	100.00	100.00

Target Colors
 ★ Below Target ■ Above Target

NOTES:

*To more closely align Service Availability reporting with WiscIT reporting, planned outages will not be included in SA calculations beginning in March FY2020. Historical data will still include planned outages.



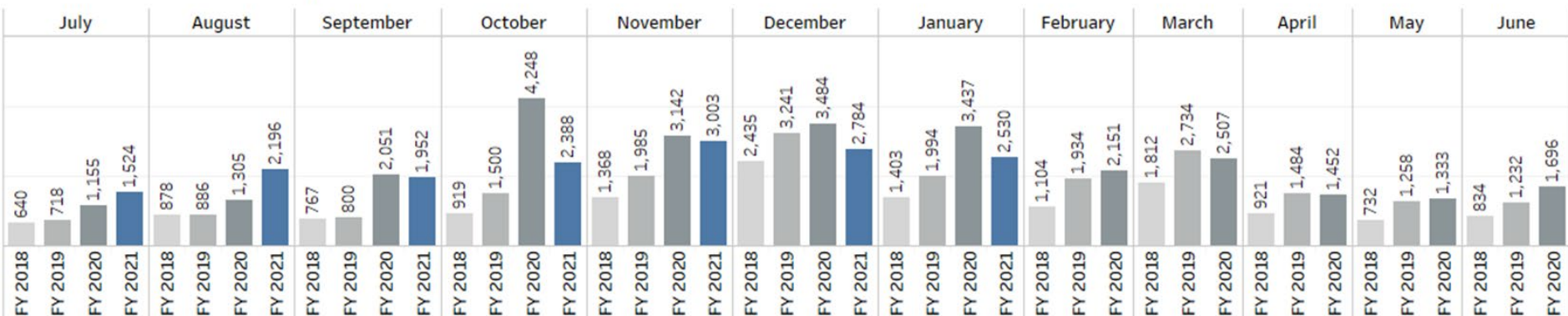
This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: APPLICATION INFRASTRUCTURE SERVICES - IAM SERVICES OVERVIEW

Help Desk Resolution Rates for IAM Services During January

	All Incidents	% of Incidents	Incidents Created by HD	Resolved by HD	* HD % Resolution	*** First Contact Resolution Rate	** Customer Satisfaction	
Multi-Factor Authentication (MFA)	1,161	38.3%	1,145	1,099	96.0%	89.9%	95.3%	IAM Target: HD % Resolution ■ At or above 85.0%
NetID Account Management	1,348	44.4%	1,316	1,158	88.0%	84.1%	93.7%	2021 Gartner Benchmark: First Contact Resolution ■ Above 71.0%
All IAM Incidents	3,090	100.0%	2,588	2,362	91.2%	86.0%	94.6%	IAM Target: Customer Satisfaction ■ At or above 85.0%

IAM Services Annual Help Desk Contacts



NOTES:

*Resolution Percentage = incidents resolved by the Help Desk rather than being escalated to a specific service team

**Survey respondents rate satisfaction on a 7 point scale in response to: "We value your opinion. How was your experience with us?" - HDI has changed their measure of Customer Satisfaction sufficiently to warrant transitioning away from that benchmark. Until a suitable benchmark can be located and evaluated, we have set a User Services target.

*** First Contact Resolution has been defined as a phone incident opened by the Help Desk and resolved by the Help Desk, within one hour of the incident being created. As only phone incidents are looked at this metric may be blank if no phone incidents were reported for that service during the previous month.

Gartner 2020 Benchmark First Contact Resolution is 74.0%.



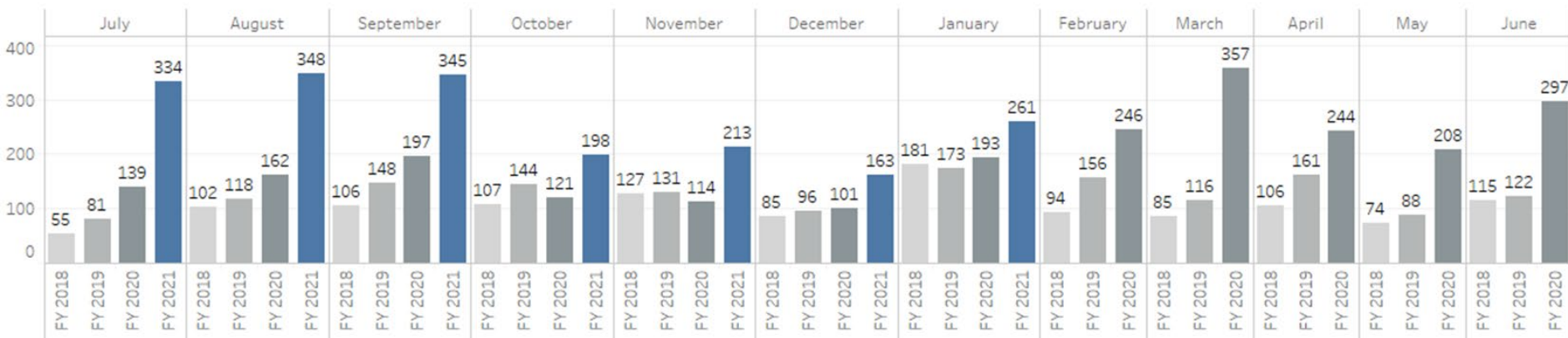
This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: APPLICATION INFRASTRUCTURE SERVICES-WEB PLATFORM SERVICES OVERVIEW

Help Desk Resolution Rates for WPS Services During January

	All Incidents	% of Incidents	Incidents Created by HD	Resolved by HD	* HD % Resolution	*** First Contact Resolution Rate	** Customer Satisfaction	AIS-WPS Targets: HD % Resolution by Service
KnowledgeBase (KB)	30	6.4%	3	3	100.0%			MyUW Madison/ System - 85% Shared Tools - 15% UW Madison Knowledgebase - 10% Web Hosting - 5% WiscWeb - 45%
MyUW Madison/System	189	40.5%	186	159	85.5%	87.5%	88.8%	
Shared Tools	17	3.6%	16	2	★12.5%			2021 Gartner Benchmark: First Contact Resolution ■ Above 71.0% ■ Below 71.0% ★
Web Hosting	140	30.0%	6	4	66.7%			WPS Services Target: Customer Satisfaction ■ At or above 85.0% ■ Below 85.0% ★
WiscWeb	67	14.3%	66	25	★37.9%	★66.7%	★71.4%	

WPS Services Annual Help Desk Contacts



NOTES:

*Resolution Percentage = incidents resolved by the Help Desk rather than being escalated to a specific service team

**Survey respondents rate satisfaction on a 7 point scale in response to: "We value your opinion. How was your experience with us?" -HDI has changed their measure of Customer Satisfaction sufficiently to warrant transitioning away from that benchmark. Until a suitable benchmark can be located and evaluated, we have set a User Services target.

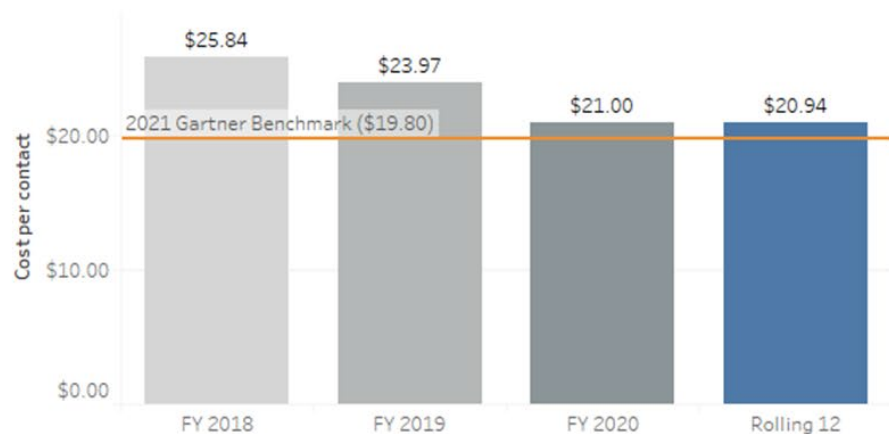
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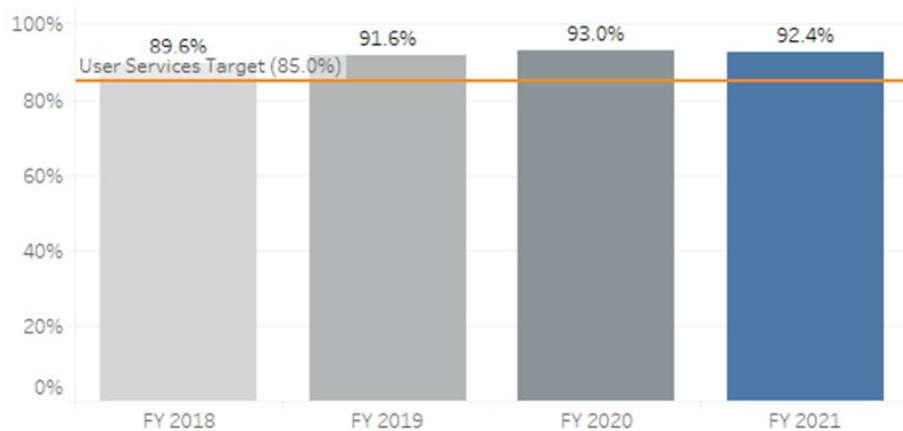


DoIT OPERATIONS: USER SERVICES-HELP DESK OVERVIEW

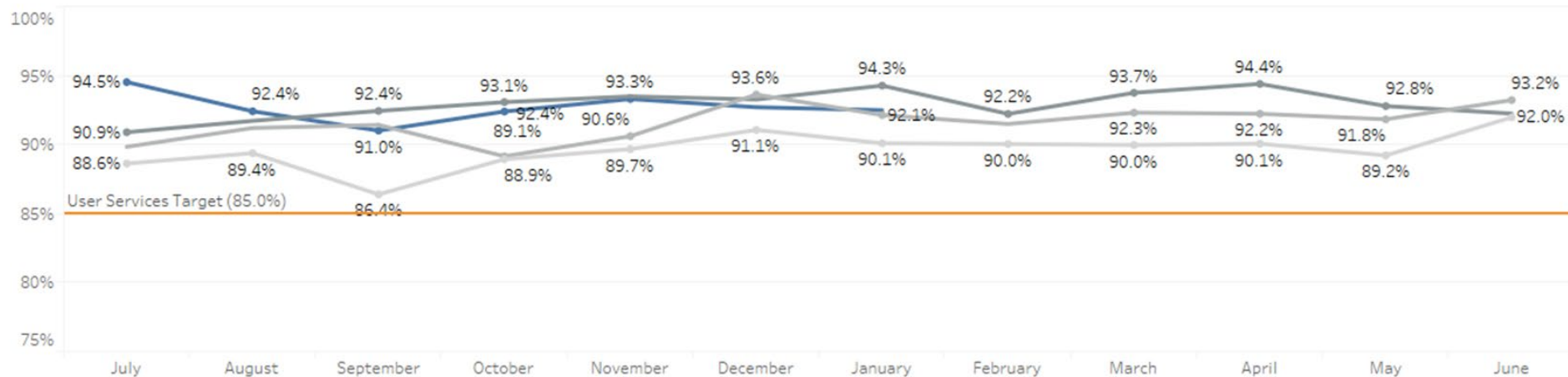
Cost per Contact



* Customer Satisfaction



Customer Satisfaction



NOTES: Survey respondents rate satisfaction on a 7 point scale in response to: "We value your opinion. How was your experience with us?"

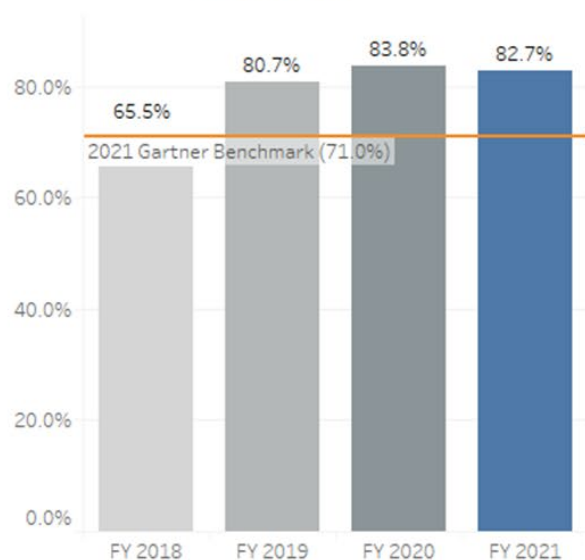
*HDI has changed their measure of Customer Satisfaction sufficiently to warrant transitioning away from that benchmark. Until a suitable benchmark can be located and evaluated, we have set a User Services target.

Gartner 2019 Benchmark Cost Per Contact is \$16.30. Gartner 2020 Benchmark Cost Per Contact is \$17.90.

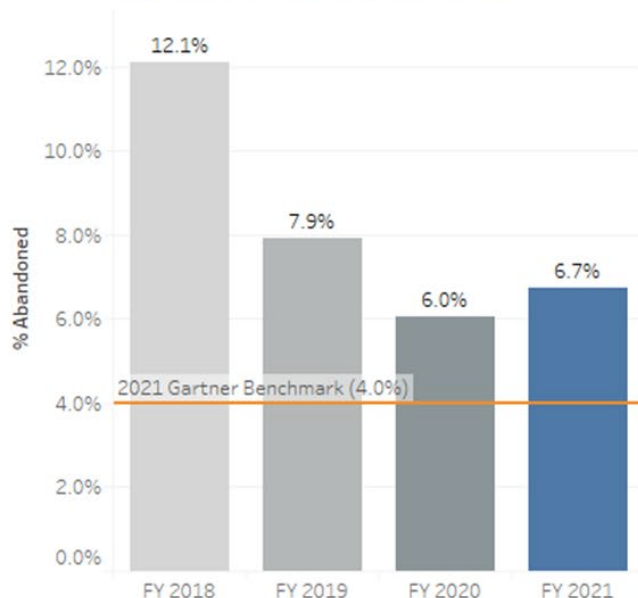


This visualization was created by DoIT in the Department of User Services.

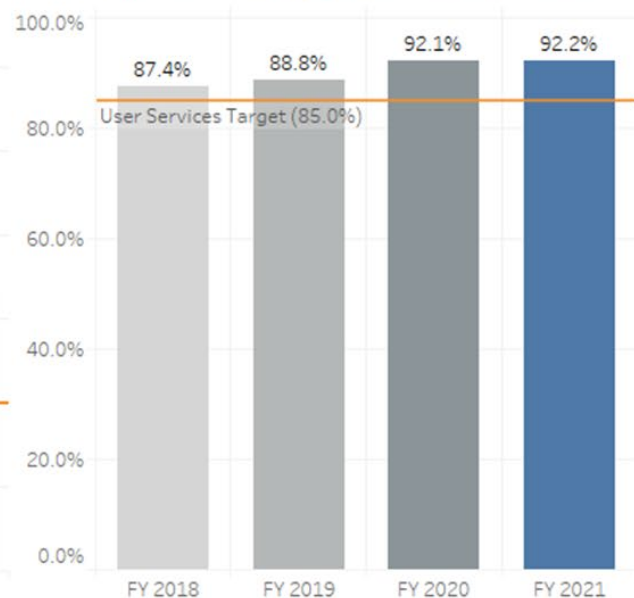
***Help Desk Average First Contact Resolution**



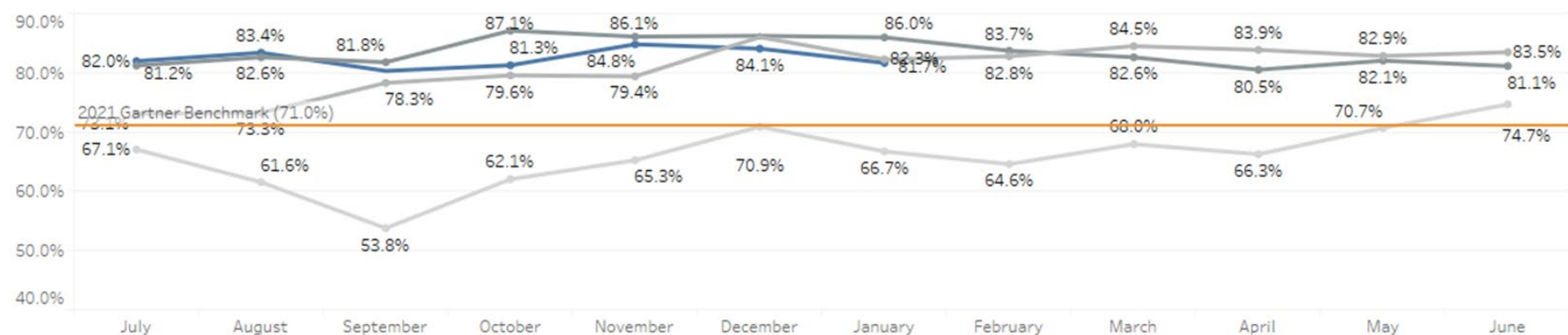
Help Desk Abandonment Rate



****Help Desk Average Resolution Rate**



Help Desk YOY First Contact Resolution



NOTES: *First Contact Resolution for Help Desk User Services has been defined as a phone incident opened by the Help Desk and resolved by the Help Desk, within one hour of the incident being created.

**Help Desk Average Resolution: defined as a phone incident opened anywhere and resolved by the Help Desk.

Gartner 2019 Benchmark Abandonment Rate is 7.4% and First Contact Resolution is 70.6%. Gartner 2020 Benchmark Abandonment Rate is 5.1% and First Contact Resolution is 74.0%.



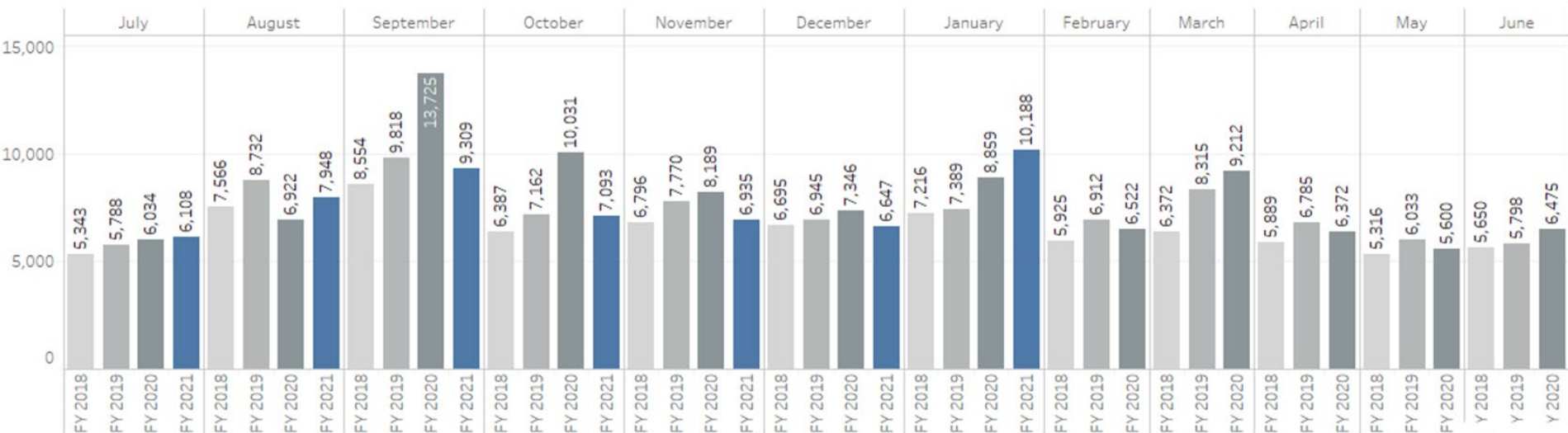
This visualization was created by DoIT in the Department of User Services.

HELP DESK RESOLUTION RATES FOR TOP 10 SUPPORTED SERVICES IN JANUARY

	Number of Records	% of Total cases created	HD Resolved	** HD % Resolved
NetID Account Management	1,316	12.9%	1,135	86.2%
Safer Badgers, General	1,275	12.5%	1,196	93.8%
Multi-factor Authentication (MFA)	1,145	11.2%	1,084	94.7%
Office 365	764	7.5%	651	85.2%
Hardware Checkout	746	7.3%	517	★69.3%
Referrals	669	6.6%	608	90.9%
Learn@UW - Canvas Madison	482	4.7%	352	★73.0%
Course Search and Enrollment App	439	4.3%	390	88.8%
UW-Madison Zoom	430	4.2%	325	★75.6%
Safer Badgers, Referrals	258	2.5%	255	98.8%

User Services Target: HD % Resolution
 ★ Below 85.0% ■ At or above 85.0%

* Help Desk Annual Contacts



NOTES: * Walk-in incidents are included for only FY20 to reflect the Walk-in & Help Desk merger

**Resolution Percentage = incidents resolved by tier 1 or tier 2 support (instead of escalating to a specific service team)

This visualization was created by DoIT in the Department of User Services.

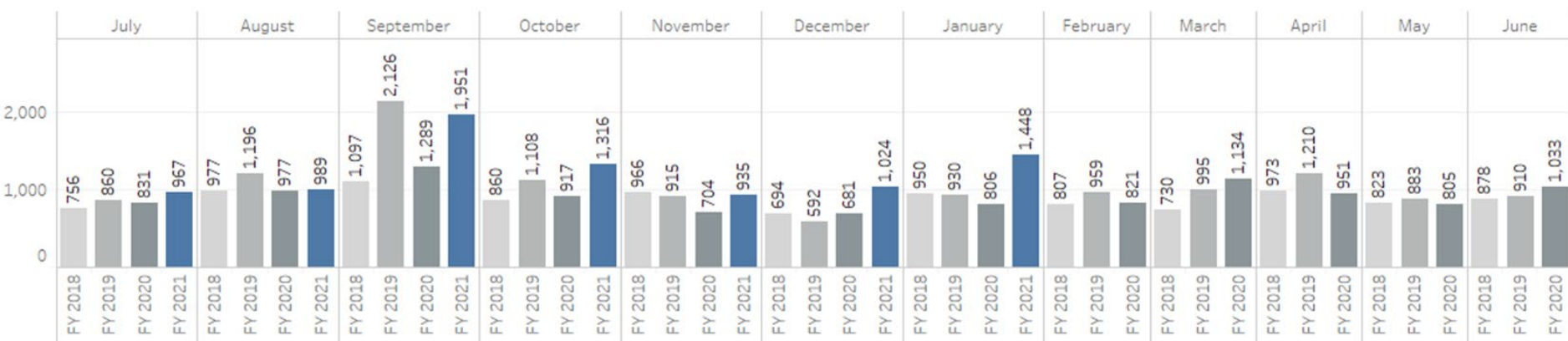


DoIT OPERATIONS: USER SERVICES - PRODUCTIVITY AND COLLABORATIVE SOLUTIONS SERVICES OVERVIEW

Resolution Rates for PCS Services During January

	All Incidents	% of Incidents	Incidents Created by HD	Resolved by HD	* HD % Resolution	*** First Contact Resolution Rate	** Customer Satisfaction	
Office 365	795	48.6%	764	669	85.2%	73.7%	91.5%	User Services Target: HD% Resolution
UW-Madison Zoom	526	32.2%	430	329	★75.6%	77.9%	96.2%	■ At or above 85.0% ■ Below 85.0% ★
UW-Madison Google Apps	143	8.7%	141	100	★70.2%	75.9%	85.7%	2021 Gartner Benchmark: First Contact Resolution
UW-Madison Box	88	5.4%	64	35	★53.1%	73.3%	★82.7%	■ Above 71.0% ■ Below 71.0% ★
WisList	50	3.1%	23	11	★47.8%	★66.7%	★82.1%	User Services Target: Customer Satisfaction
Qualtrics	27	1.7%	19	16	★84.2%	71.4%	100.0%	■ At or above 85.0% ■ Below 85.0% ★
Cloud Fax	7	0.4%	7	4	★57.1%	100.0%		

PCS Services Annual Help Desk Contacts



NOTES:

*Resolution Percentage = incidents resolved by the Help Desk rather than being escalated to a specific service team

**Survey respondents rate satisfaction on a 7 point scale in response to: "We value your opinion. How was your experience with us?" -HDI has changed their measure of Customer Satisfaction sufficiently to warrant transitioning away from that benchmark. Until a suitable benchmark can be located and evaluated, we have set a User Services target.

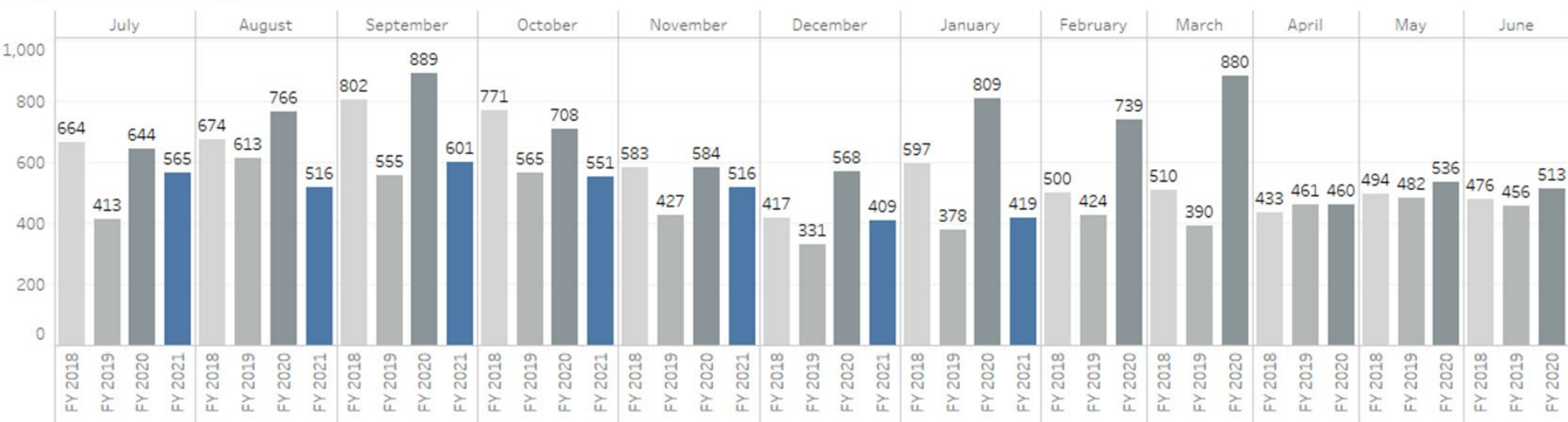
*** First Contact Resolution has been defined as a phone incident opened by the Help Desk and resolved by the Help Desk, within one hour of the incident being created. As only phone incidents are looked at this metric may be blank if no phone incidents were reported for that service during the previous month. Gartner 2020 Benchmark First Contact Resolution is 74.0%

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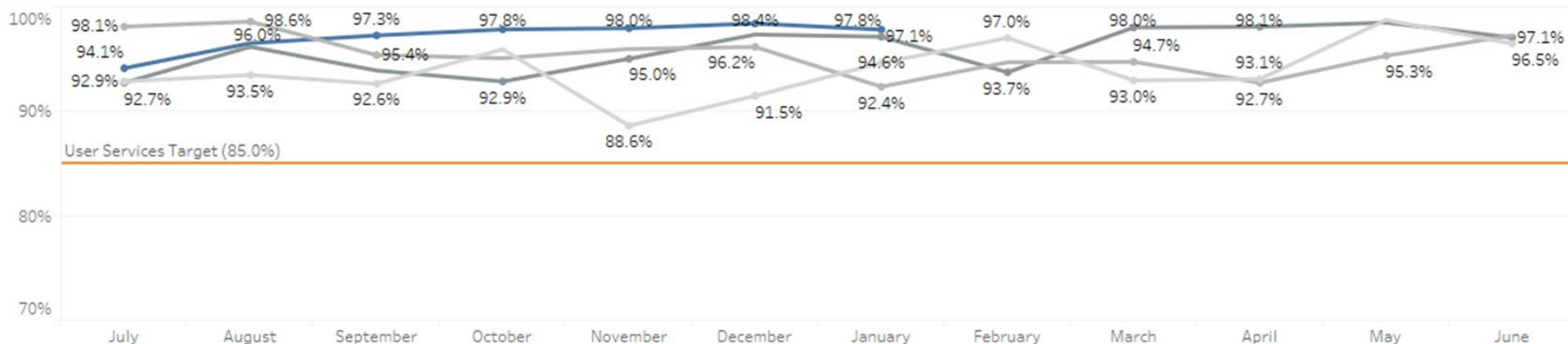


DoIT OPERATIONS: USER SERVICES - DEPARTMENTAL SUPPORT OVERVIEW

Departmental Support - Annual Contacts



Customer Satisfaction



NOTES: Departmental Support Annual Contacts represent cases resolved by DS teams.

Survey respondents rate satisfaction on a 7 point scale in response to: "We value your opinion. How was your experience with us?"

7 Completely satisfied, 6 Mostly satisfied, 5 Somewhat satisfied, 4 Neither satisfied nor dissatisfied, 3 Somewhat dissatisfied, 2 Mostly dissatisfied, 1 Completely dissatisfied

HDI has changed their measure of Customer Satisfaction sufficiently to warrant transitioning away from that benchmark. Until a suitable benchmark can be located and evaluated, we have set a User Services target.

This visualization was created by DoIT in the Department of User Services.

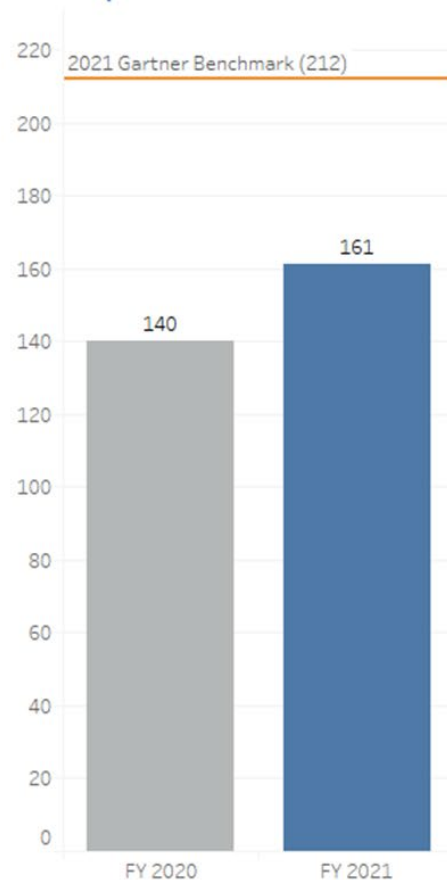


DoIT OPERATIONS: USER SERVICES - DEPARTMENTAL SUPPORT METRICS

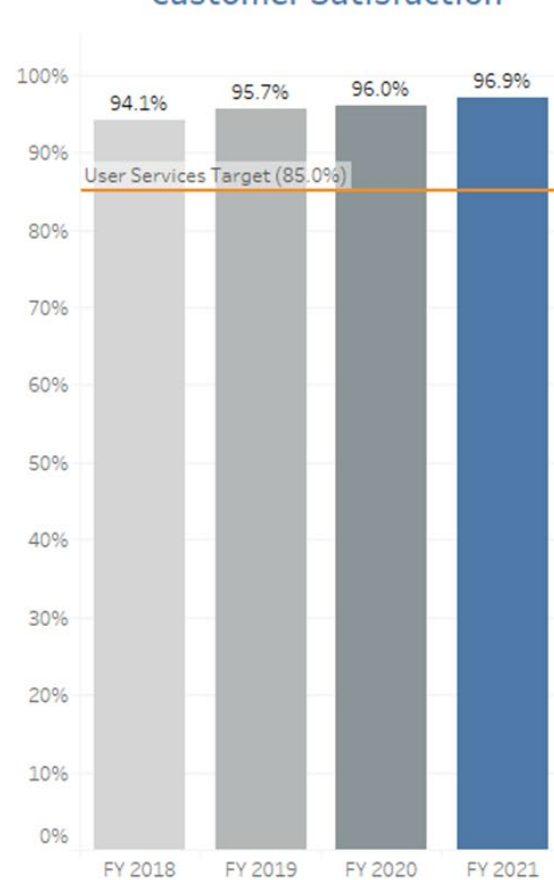
* Cost Per Endpoint



** Endpoints Per Technician



*** Customer Satisfaction



The price per endpoint calculation uses representative contracts to demonstrate the the cost for low, medium, and high complexity for support contract customers (where complexity is a composite of factors such as diversity of supported models, geographic dispersion and scope of supported services).

*FY20 will be used until we process captured data.

**2020/2021 Gartner Benchmarks include printers. We are exploring the ramifications for our reporting methods. 2019 Gartner benchmark was 283 Endpoints per Technician. Previously published 2020 value (499) was overall average. The 2020 average for Small Environments was 406. Updated December 2020.

***Survey respondents rate satisfaction on a 7 point scale in response to: "We value your opinion. How was your experience with us?"

Until a suitable benchmark can be located and evaluated, we have set a User Services target.

2019 Cost Per Endpoint Benchmark was \$988 and our complexity levels for FY19 were \$587 for low complexity, \$783 for medium complexity, and \$977 for high complexity. 2020 Cost Per Endpoint Benchmark was \$1078.

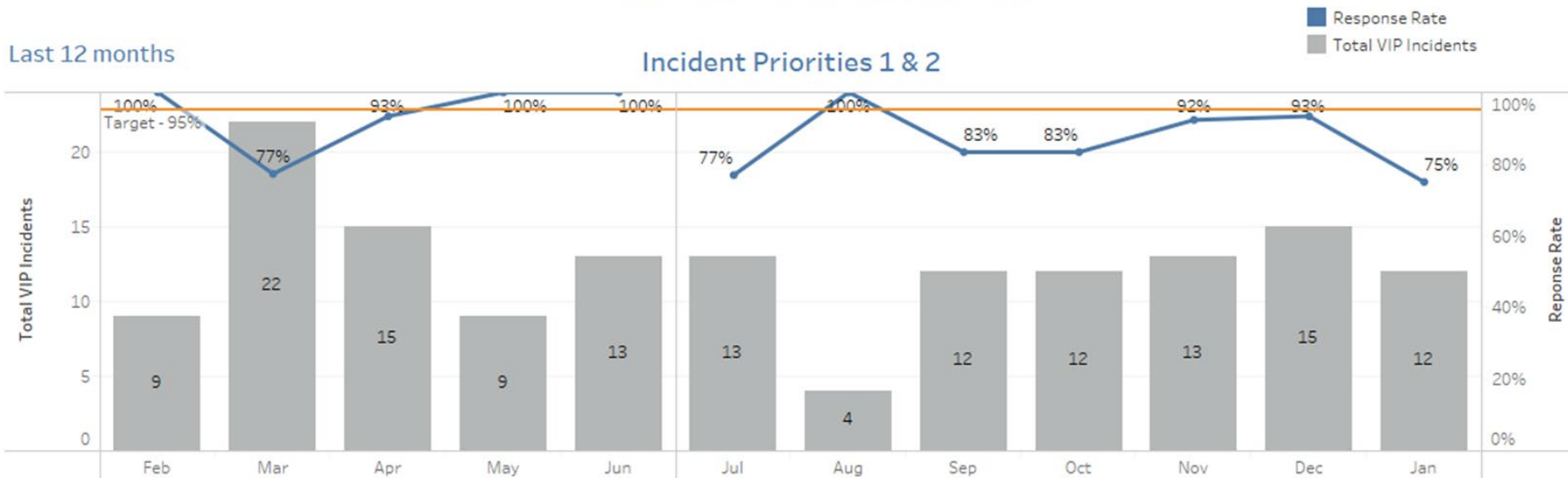
This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: DEPARTMENTAL SUPPORT SERVICE LEVEL AGREEMENT (SLA) RESPONSE RATE

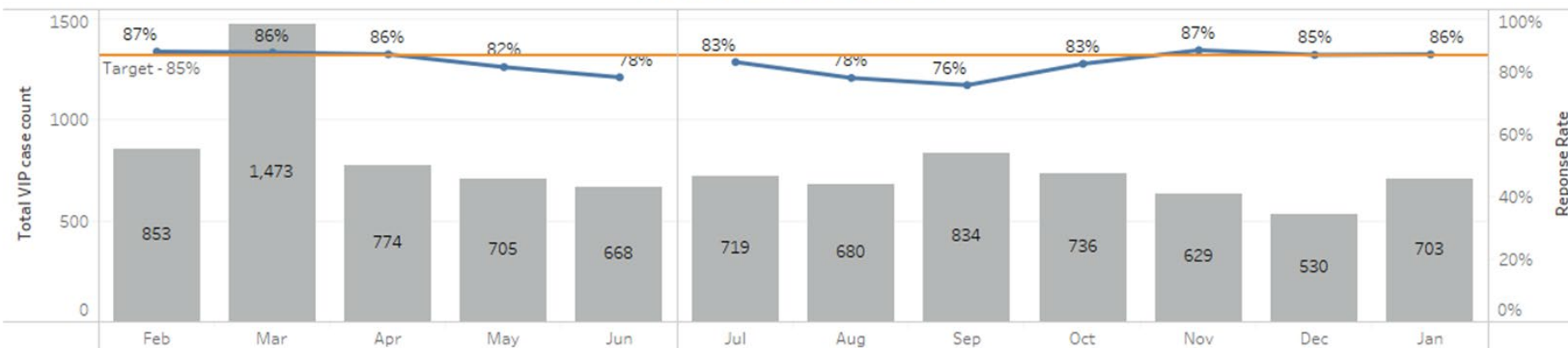
SLA = One hour acknowledgement

Last 12 months

Incident Priorities 1 & 2



Incident Priorities 3 & 4



Included incidents fall under a Departmental Support SLA of one hour response time and are owned or resolved by a DS team or created, owned, and resolved by HDL2 working on Departmental Support cases. All services and categories are included. Priority definitions included in Technical Notes.

This visualization was created by DoIT in the Department of User Services.



DoIT OPERATIONS: ENTERPRISE BUSINESS SYSTEMS SERVICE AVAILABILITY

Last 12 months

Service	Target	February %	March %	April %	May %	June %	July %	August %	September %	October %	November %	December %	January %
HRS	99.000%	99.603	100.000	99.313	100.000	★98.935	100.000	100.000	★91.271	★96.013	100.000	100.000	★97.050
SFS	99.000%	99.968	99.941	99.989	99.464	100.000	100.000	100.000	100.000	100.000	99.799	100.000	100.000
SIS	99.000%	100.000	100.000	99.998	100.000	100.000	100.000	99.953	100.000	100.000	100.000	100.000	99.933
Informatica (FASTAR)	99.000%	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
UWBI (OBIEE)	98.000%	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
Workload Automation	99.000%	★98.904	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000

Target Colors
 ★ Below Target ■ Above Target

NOTES:

*To more closely align Service Availability reporting with WiscIT reporting, planned outages will not be included in SA calculations beginning in March FY2020. Historical data will still include planned outages.



This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: NETWORK SERVICES - WAN SERVICE AVAILABILITY

Network	Target	November %	December %	January %	Network	Target	November %	December %	January %	Network	Target	November %	December %	January %
Upham Woods	99.900%	★98.059	100.000	99.997	UW Platteville	99.900%	100.000	100.000	100.000	UWC Manitowoc	99.900%	100.000	100.000	100.000
UW Colleges Extension	99.900%	100.000	100.000	100.000	UW River Falls	99.900%	100.000	100.000	100.000	UWC Marathon Co.	99.900%	100.000	100.000	100.000
UW Eau Claire	99.900%	100.000	100.000	100.000	UW Stevens Point	99.900%	100.000	100.000	100.000	UWC Marinette	99.900%	100.000	100.000	100.000
UW Green Bay	99.900%	100.000	100.000	100.000	UW Stout	99.900%	100.000	100.000	100.000	UWC Marshfield Wood Co.	99.900%	100.000	100.000	100.000
UW Health	99.900%	100.000	100.000	100.000	UW Superior	99.900%	100.000	100.000	100.000	UWC Richland	99.900%	100.000	100.000	100.000
UW La Crosse	99.900%	100.000	100.000	100.000	UW Whitewater	99.900%	100.000	100.000	100.000	UWC Rock Co.	99.900%	100.000	100.000	100.000
UW Madison	99.900%	100.000	100.000	100.000	UWC Baraboo Sauk Co.	99.900%	100.000	100.000	100.000	UWC Sheboygan	99.900%	100.000	100.000	100.000
UW Milwaukee	99.900%	100.000	100.000	100.000	UWC Barron Co.	99.900%	100.000	100.000	100.000	UWC Washington Co.	99.900%	100.000	100.000	100.000
UW Oshkosh	99.900%	100.000	100.000	100.000	UWC Fond du Lac	99.900%	100.000	100.000	100.000	UWC Waukesha	99.900%	100.000	100.000	100.000
UW Parkside	99.900%	100.000	100.000	100.000	UWC Fox Valley	99.900%	100.000	100.000	100.000					

Target Colors
 ★ Below Target ■ Above Target

-Availability is for wired (not wi-fi) connectivity at each institution. Availability calculated as total uptime / total time per month. Wide Area Network is considered down when completely disconnected from the system (i.e. both routers down at 4-year schools, the single router down at 2-year schools). Any planned outages are included in the calculations, sometimes making availability appear below commercial standards of 99.9% or 99.99% uptime.

-The 99.9% SLA rate with UW System is for unplanned outages; the figures in this table include all outages – planned or unplanned. SLA faults here (highlighted in RED) may not actually be an SLA agreement fault.

This visualization was created by DoIT in the Department of User Services.



DoIT OPERATIONS: WAN SPEEDS - NETWORK SERVICES

IN

		20-Nov	20-Dec	21-Jan
UW-Madison campus	Avg (Gb/sec)	7.60	5.00	5.40
	Max (Gb/sec)	16.30	16.30	16.60
	Min (Gb/sec)	1.70	1.10	1.40
	% of full capacity (100Gbps)	7.60	5.00	5.40
UW-Madison research	Avg (Gb/sec)	16.20	16.60	19.70
	Max (Gb/sec)	90.30	65.40	67.50
	Min (Gb/sec)	6.20	6.80	8.40
	% of full capacity (100Gbps)	16.20	16.60	19.70
Internet Exchange (MadIX)	Avg (Gb/sec)	6.90	6.00	7.50
	Max (Gb/sec)	13.40	11.80	14.20
	Min (Gb/sec)	0.00	0.00	0.00
	% of full capacity (20Gbps)	34.50	30.00	37.50

OUT

		20-Nov	20-Dec	21-Jan
UW-Madison campus	Avg (Gb/sec)	2.50	2.40	3.30
	Max (Gb/sec)	14.20	10.00	15.30
	Min (Gb/sec)	0.91	0.97	0.92
	% of full capacity (100Gbps)	2.50	2.40	3.30
UW-Madison research	Avg (Gb/sec)	15.90	13.50	15.70
	Max (Gb/sec)	60.20	38.50	47.00
	Min (Gb/sec)	4.50	4.40	3.90
	% of full capacity (100Gbps)	15.90	13.50	15.70
Internet Exchange (MadIX)	Avg (Gb/sec)	6.60	3.60	4.70
	Max (Gb/sec)	10.50	6.40	8.80
	Min (Gb/sec)	0.00	0.00	0.00
	% of full capacity (20Gbps)	33.00	18.00	23.50

-Average (mean) network usage includes night and weekend readings of typically much lower traffic. Averages for UW-Madison Campus Internet Access and UW-Madison internet Exchange will likely be lower in summer months than they are during the academic year.

-95th percentile usage is a more common industry standard than avg/max/min for measuring utilization; Network Services is working on providing that measure as well in future reports.

A peering exchange, such as the Madison Internet Exchange, enables networks to interconnect directly to each other and exchange IP (Internet) traffic. Peering is the exchange between two independent networks for the benefit of both networks.

-The target for WAN speeds is a capacity threshold instead of a specified speed to maintain. When 95th percentile speeds reach about 45-55% of capacity, there is an engineering exploration to determine the cause of increased usage and whether increased capacity is warranted.



This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: NETWORK SERVICES - WIRELESS ACCESS POINTS

Airwave 1

Total Controllers: 8
Total APs: 4208

	Target	February	March	April	May	June	July	August	September	October	November	December	January
Access Points Avg. Uptime per Day	99.50%	99.73%	99.73%	★99.48%	★99.16%	★99.14%	★99.20%	★98.97%	★98.56%	★98.51%	★98.47%	★98.55%	★98.59%
Avg. AW1-Controller Uptime per Day	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	★99.94%	100.00%

Avg. Number of APs Down per Day		26.55	26.52	41.23	53.65	56.27	56.61	76.42	89.10	88.65	77.53	80.84	71.48
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Airwave 2

Total Controllers: 8
Total APs: 4679

	Target	February	March	April	May	June	July	August	September	October	November	December	January
Access Points Avg. Uptime per Day	99.50%	99.96%	99.92%	99.92%	99.83%	★99.45%	★99.37%	99.71%	99.84%	99.80%	99.77%	99.66%	99.67%
Avg. AW2-Controller Uptime per Day	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Avg. Number of APs Down per Day		7.97	19.42	21.57	46.71	33.27	34.48	27.42	14.10	15.87	29.60	28.61	53.29
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Airwave 3

Total Controllers: 4
Total APs: 2831

	Target	February	March	April	May	June	July	August	September	October	November	December	January
Access Points Avg Uptime Per Day	99.50%	99.95%	99.95%	99.93%	99.84%	99.79%	99.81%	99.77%	99.64%	99.70%	99.80%	99.84%	99.87%
Avg. AW3-Controller Uptime per Day	100.00%	100.00%	100.00%	100.00%	★99.61%	★99.98%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	★99.99%

Avg Number of APs Down per Day		1.59	1.52	14.50	5.65	9.77	9.29	25.81	15.77	18.94	11.50	12.13	18.65
--------------------------------	--	------	------	-------	------	------	------	-------	-------	-------	-------	-------	-------

Airwave is the HPE/Aruba network management platform, offering visibility into wired and wireless networks, specifically designed with mobile devices in mind. It enables proactive monitoring of the health and performance of wireless networks and scales to 4000 devices per instance.

Access Points Benchmark:

■ At or above 99.5%

★ ■ Below 99.5%

Controller Uptime Benchmark:

■ At 100.0%

★ ■ Below 100.0%



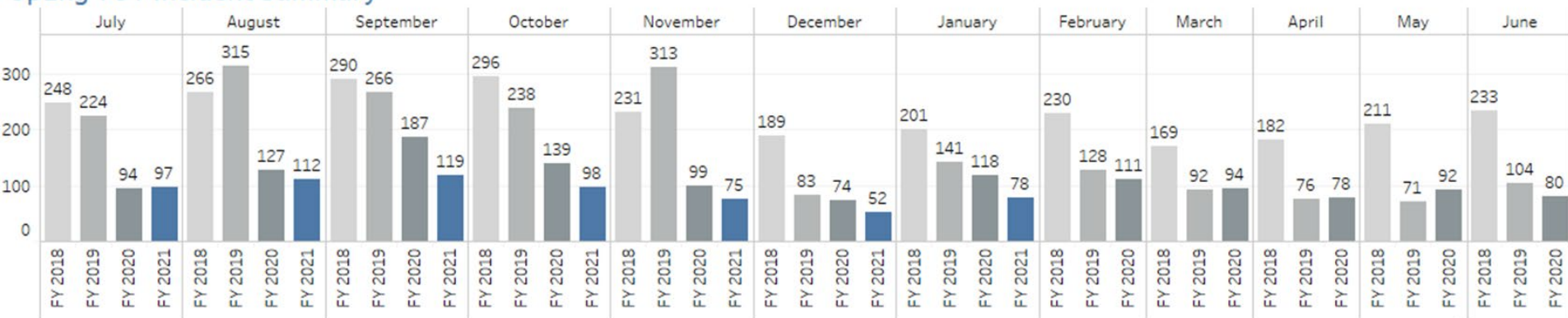
This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: OPERATIONS ENGINEERING INCIDENT SUMMARY

Four Months Incident Summary by Subcategory

	October	November	December	January
Campus Network				
AANTS	2	5	2	4
Bandwidth Threshold Alarm	3	3	5	2
Firewall/Install			1	1
Firewall/Problem	5	1	1	2
Firewall/Rules	1	5	1	
Port Error Threshold Alarm	1	2	2	
Request/Data Jack/Activation	2	2	2	2
Request/DHCP	3		3	
Request/DNS/Hostmaster	3		1	2
Request/DNS/Network Services	16	10	4	20
Request/Equipment Installation	1	1		
Request/Hardware	2	3		5
Request/IP Allocation	19	14	10	10
Video		1		
Wired Network Issue	12	3	8	2
Wireless	9	9	4	10
Wireless Device Registration	1			
Campus Network Housing				
Device Registration HAP	6	4		9
HAP Reset	1	1	1	
Latency or Packet Drop		3		
VPN				
Client Issue		2	2	1
Submit Incident	9	3	2	6
eduroam				
Submit Incident	1	1		
Troubleshooting		1	1	
Others				
	1	1	2	2
Grand Total	98	75	52	78

OpEng YOY Incident Summary



NOTES: Incident counts are pulled directly from WiscIT (Powered by Cherwell) as incidents touched by the OpEng Team

This visualization was created by DoIT in the Department of User Services.



DoIT OPERATIONS: SYSTEMS ENGINEERING AND OPERATIONS SERVICE AVAILABILITY

Last 12 months

Service	Target	February %	March %	April %	May %	June %	July %	August %	September %	October %	November %	December %	January %
Bucky Backup	99.000%	100.000	99.870	99.386	100.000	100.000	100.000	99.615	★95.769	★98.329	99.188	100.000	100.000
Campus Card Access	99.500%	★98.904	100.000	100.000	100.000	100.000	100.000	99.617	100.000	100.000	100.000	100.000	100.000
Campus Computing Infrastructure	99.500%	100.000	100.000	100.000	99.989	100.000	100.000	100.000	100.000	100.000	★99.477	100.000	100.000
Life Safety, Environmental Control, Fire Alarm Monitoring	99.900%	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
MS SQL Shared Hosting	99.000%	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
PCI	99.500%	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
Report Distribution (Cypress)	98.000%	★96.244	100.000	99.921	99.921	100.000	99.664	100.000	100.000	100.000	99.799	100.000	100.000
Select Agent	99.900%	100.000	100.000	100.000	★97.258	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
Storage	99.900%	100.000	★95.616	100.000	100.000	100.000	★98.132	100.000	100.000	100.000	100.000	100.000	100.000
Video Monitoring System	99.900%	100.000	100.000	100.000	100.000	100.000	99.973	100.000	100.000	100.000	100.000	100.000	99.960
WiscIT (Cherwell)	99.500%	100.000	100.000	100.000	100.000	99.944	99.630	100.000	100.000	★86.962	100.000	★99.375	100.000

Target Colors
 ★ Below Target ■ Above Target

NOTES:

*To more closely align Service Availability reporting with WiscIT reporting, planned outages will not be included in SA calculations beginning in March FY2020. Historical data will still include planned outages.

This visualization was created by DoIT in the Department of User Services.



DoIT OPERATIONS: SOLUTIONS ENGINEERING SYSTEMS MANAGEMENT SUMMARY

	SLA % Availability	Availability % of Total Time	Number of Servers Managed	Customer Requests	Servers per FTE	Gartner 2021 Median Servers/FTE
Windows	99.950	99.990	339	98	150.7	293.0
Linux	99.950	99.990	412	110	164.8	234.0

Top Customers By Percentage of Labor Hours

	Rank	% of Total
DoIT - Public Cloud Service	1	15.60%
DoIT Internal Customers	2	13.70%
DoIT - Microsoft SQL Server Hosting	3	6.70%
HRS	4	2.30%
UWPD	5	3.10%
SFS	6	2.00%
MILER	7	1.80%
WHS	8	1.00%
Rec Sports	9	1.00%
WiscIT	10	0.90%

Top Customers By Server Count

	Rank	# of Servers
Cybersecurity	1	98
SFS, HRS	2	96
Identity and Access Management	3	60
DoIT Web Platform Services	4	47
Student Information System	5	40
Office 365	6	27
Imaging	7	25
Database Aggregation (FASTAR)	8	24
DoIT Service Management	9	23
Wisconsin Historical Society	10	22

This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: SOLUTIONS ENGINEERING VULNERABILITIES SUMMARY

Four Months Vulnerability Summary

Type	Severity	October	November	December	January
Potential Vulnerability	1	1	2	2	
	2	4	1		
	3	33	38	4	12
	4		1	8	8
	5			1	
Vulnerability	1	74	13	9	6
	2	141	112	87	116
	3	583	2,025	3,093	884
	4	1,015	2,471	1,976	1,451
	5	126	539	1,437	781
Vulnerability or Potential Vulnerability	2		2		
	3	7	6	3	8
	4	7	9	1	48
	5		1	1	
Grand Total		1,991	5,220	6,622	3,314

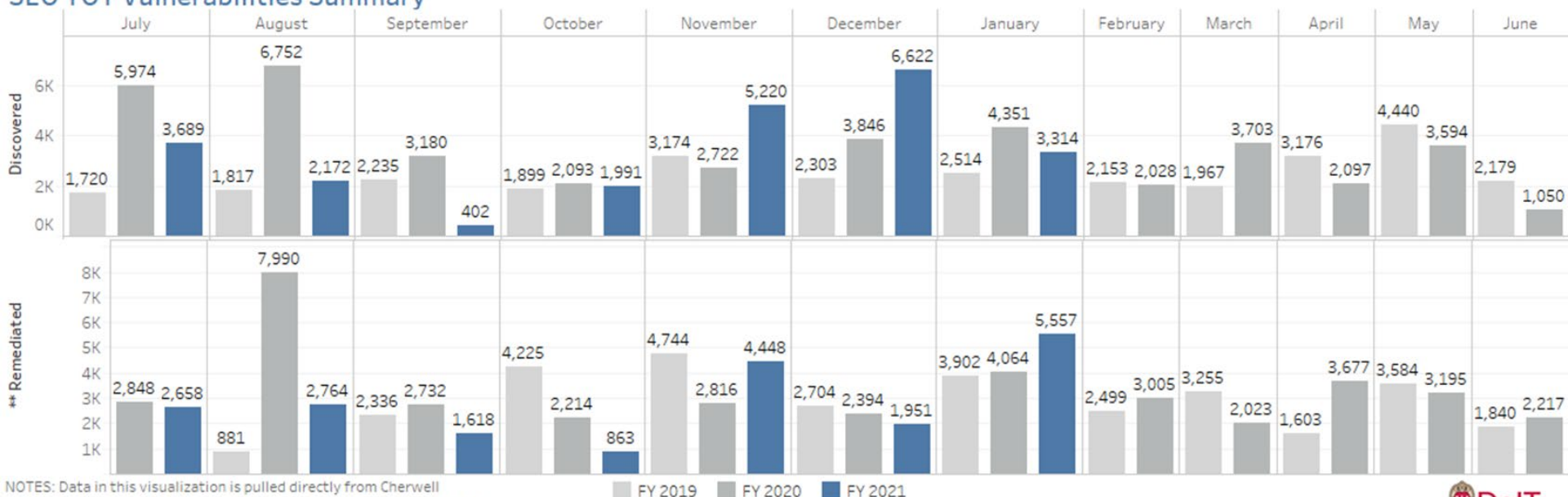
* Active & Urgent Vulnerabilities

102

Remaining From January

5

SEO YOY Vulnerabilities Summary



NOTES: Data in this visualization is pulled directly from Cherwell

* Refers to the number of active vulnerabilities with a severity of 4 or 5.

**Remediated data is currently not available prior to August 2018

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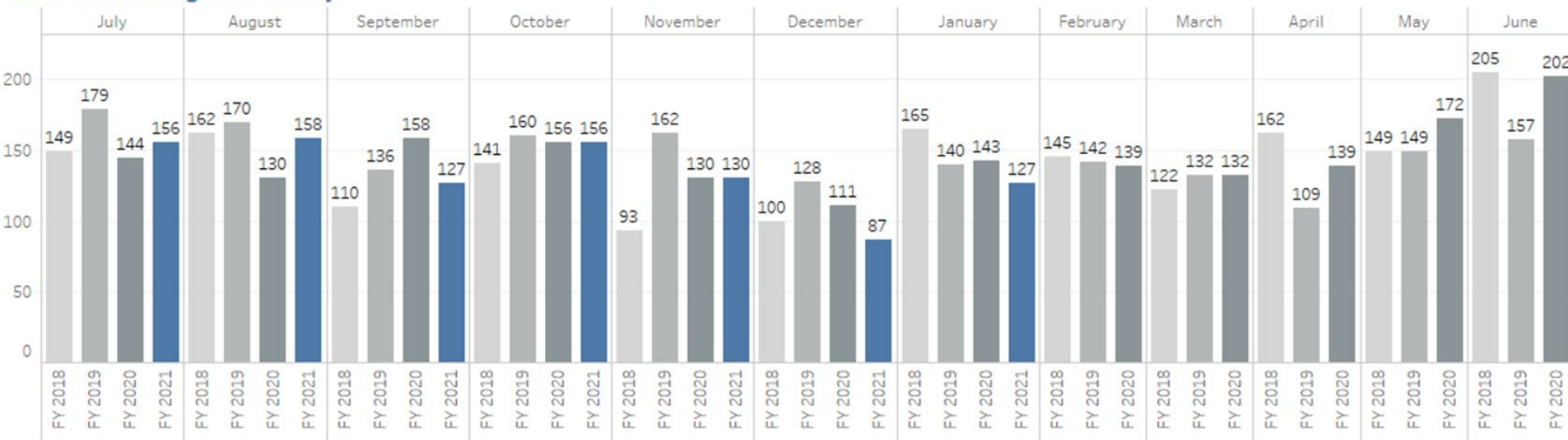


DoIT OPERATIONS: SYSTEMS & NETWORK CONTROL CENTER

* Four Months Network Problem Summary

Technical Service	October	November	December	January
Boreas	7	13	2	7
Campus Network	71	96	119	72
MUFN	4	5	3	4
Northern Tier	1	3		
UW SysNET	15	15	10	7
Grand Total	98	132	134	90

SEO YOY Outage Summary

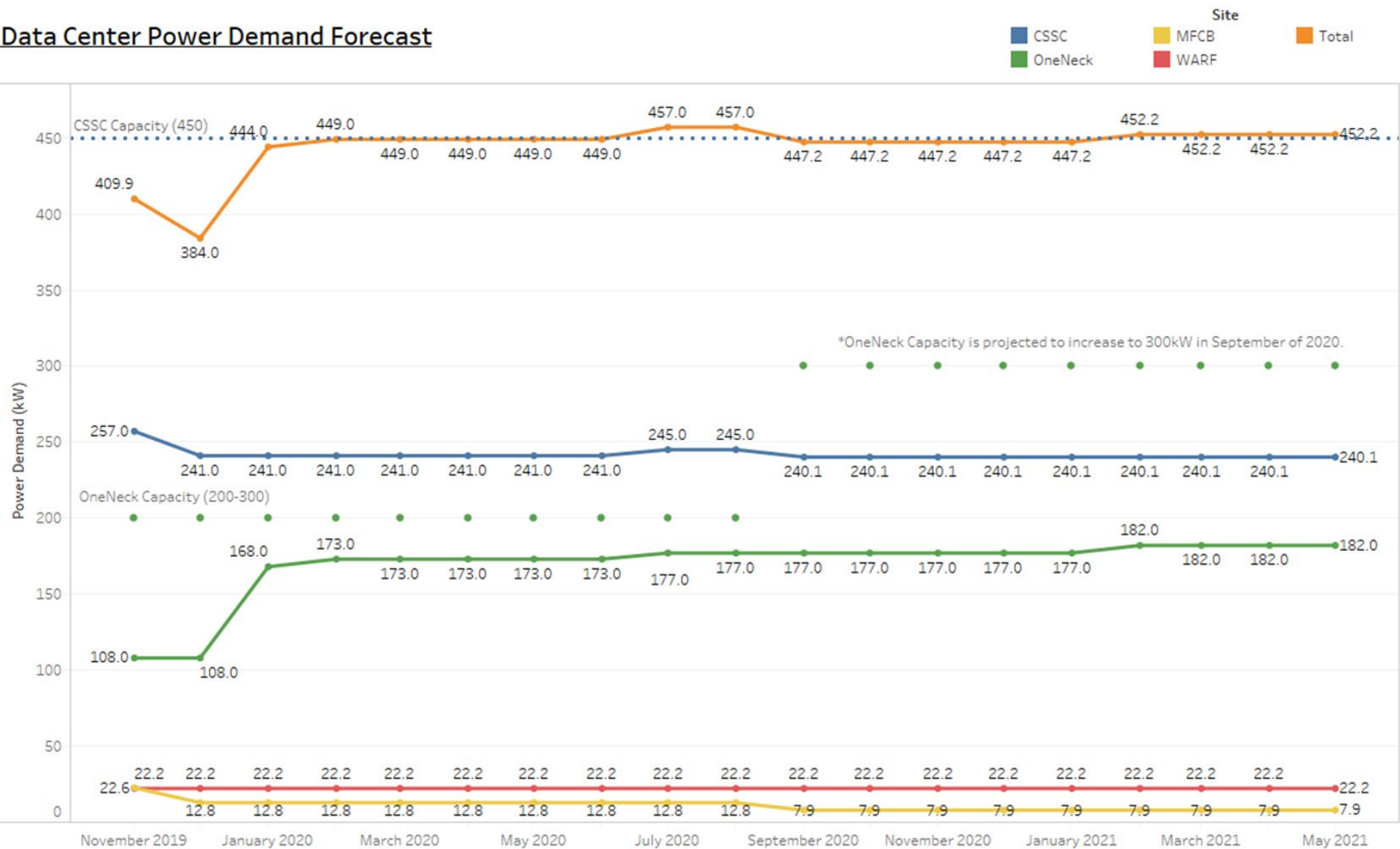


*If blank, zero problems were reported.

This visualization was created by DoIT in the Department of User Services.



Data Center Power Demand Forecast



-OneNeck footprint is trending up as WIPAC (IceCube) continues its evacuation of 222 W. Washington and we shift more of our mission-critical systems Site A to OneNeck.
-CSSC footprint is trending up significantly due to research storage, CyberSecurity Elastic servers, and updates to Select Agent and other infrastructure.
-WARF is being evacuated through attrition.
-MFCB will slightly decline as we propose to move Select Agent Site B from MFCB to OneNeck, pending Network Services design.

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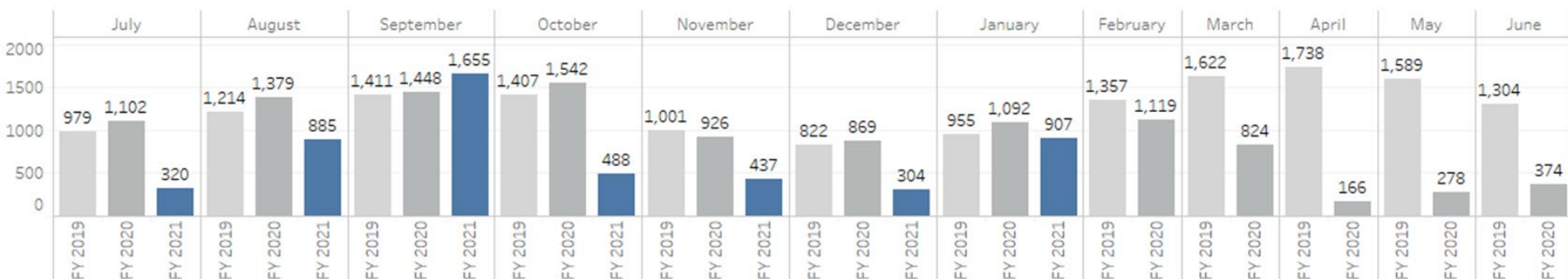


DOIT OPERATIONS: DIGITAL PUBLISHING & PRINTING SERVICES

DPPS Rework Information

	Total Rework	Cost of Rework	Average Rework
June	0	\$0.00	0.00%
July	0	\$0.00	0.00%
August	0	\$0.00	0.00%
September	0	\$0.00	0.00%
October	0	\$0.00	0.00%
November	0	\$0.00	0.00%
December	0	\$0.00	0.00%
January	0	\$0.00	0.00%

Total Jobs



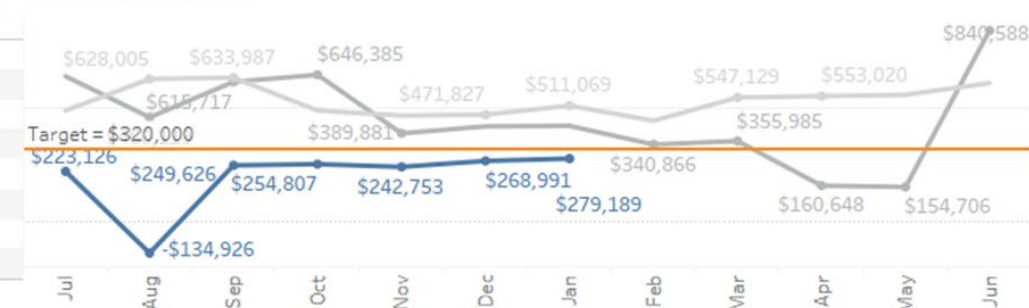
Average On-Time Percentage by Stream

	June	July	August	September	October	November	December	January
Contract	★95.65%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Digital Black	★97.56%	100.00%	★92.09%	★96.92%	★94.00%	100.00%	100.00%	100.00%
Digital Color	★95.76%	100.00%	★94.87%	★93.67%	★93.96%	★99.40%	★99.40%	99.97%
Extension DPC	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Large Format	★85.71%	100.00%	★97.69%	★95.80%	100.00%	100.00%	100.00%	100.00%
Offset Print	★97.14%	100.00%	★94.55%	★93.84%	★96.96%	★94.25%	★95.25%	★99.76%
School of Human Ecology DPC	100.00%	100.00%	100.00%	★99.01%	100.00%	100.00%	100.00%	100.00%
WEBCRD **	★0.00%	100.00%	100.00%	100.00%	100.00%			
WSB DPC	★0.00%	100.00%	★97.84%	★96.77%	100.00%	100.00%	100.00%	★96.12%

* Total Revenue adjusted in June FY20 and August FY21 by +/- \$385K

** NOTE: As of November 2020, WEBCRD has been consolidated into WSB DPC.

* Total Revenue



This visualization was created by DoIT in the Department of User Services.



DoIT OPERATIONS: ACADEMIC TECHNOLOGY - LEARN@UW USAGE & SUPPORT

	Sep-20	Oct-20	Nov-20	20-Dec	Jan-21	Notes:
Kaltura Mediaspace	Incidents Resolved by Help Desk	146	62	36	25	45
	Incidents Resolved by Learn@UW Madison	41	18	22	21	21
	Average Play Time (mins)	12	13	14	15	
	Contributors		3,244	3,744	7,195	
	Duration of uploaded media		304,308	249,786	2,617,780	
	New Media Assets	19,437	16,481	14,395	59,736	
	Number of Plays	1,535,005	1,404,686	1,127,236	617,645	
	Storage Utilized (TB)	92	98	102	132	
	Time Played (mins)	18,167,594	18,658,422	15,889,960	9,197,828	
	Total Media Assets	180,086	196,291	210,776	270,515	
Turnitin	Unique viewers		29,537	27,740	24,687	
	Incidents Resolved by Help Desk	4	2	1	3	1
	Incidents Resolved by Learn@UW Madison	0	2	1	0	3
	Active Classes	533	599	581	628	471
	Active Instructors	615	812	863	963	449
	Instructor Accounts	2,423	2,580	2,670	2,751	2,835
	Student Accounts	26,134	28,836	30,053	31,002	31,224
	Submissions	29,475	50,541	43,242	38,894	2,425
	Incidents Resolved by Help Desk	1	0	2	0	1
	Incidents Resolved by Learn@UW Madison	13	7	3	9	8
ACAR	New Pressbooks this Month	5	9	9	2	4
	New Storyline 360 Modules this Month	4	0	0	4	1
	Total Pressbooks	515	524	533	535	539
	Total Storyline 360 Modules	184	184	184	188	189
	Unique Users	7,954	8,242	8,271	8,302	8,898
	Incidents Resolved by Help Desk	647	270	171	195	418
	Incidents Resolved by Learn@UW Madison	221	126	97	128	166
	Active For-Credit Courses	3,878	3,945	3,964	3,957	3,710
	Active Training Courses	573	590	591	607	640
	Unique Instructors	5,431	5,566	5,668	5,665	5,009
Canvas	Unique Students	42,399	42,520	42,421	42,165	40,351
	Incidents Resolved by Help Desk	3	4	0	2	0
	Incidents Resolved by Learn@UW Madison	10	9	1	4	2
	Active Courses	63	59		47	
	Instructors	400	390		360	
	Unique Students	3,487	3,533		1,884	
	Incidents Resolved by Help Desk					
	Incidents Resolved by Learn@UW Madison					
	Active Courses					
	Instructors					
Atomic Assessments	Unique Students					
	Incidents Resolved by Help Desk					
	Incidents Resolved by Learn@UW Madison					
	Active Courses					
	Instructors					
	Unique Students					
	Incidents Resolved by Help Desk					
	Incidents Resolved by Learn@UW Madison					
	Active Courses					
	Instructors					
Kaltura Mediaspace	Unique viewers					
	Incidents Resolved by Help Desk					
	Incidents Resolved by Learn@UW Madison					
	Active Classes					
	Active Instructors					
	Instructor Accounts					
	Student Accounts					
	Submissions					
	Incidents Resolved by Help Desk					
	Incidents Resolved by Learn@UW Madison					

This visualization was created by DoIT in the Department of User Services.



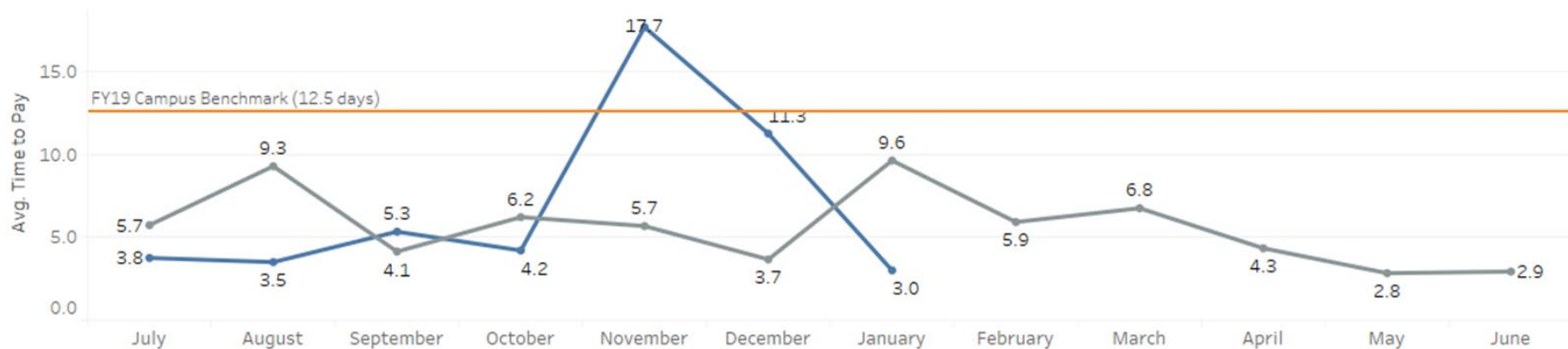
DoIT OPERATIONS: ACADEMIC TECHNOLOGY - LEARN@UW USAGE & SUPPORT

	Sep-20	Oct-20	Nov-20	Dec-20	Fall 2020	Jan-21	
*Top Hat	Unique Students				2,516		Top Hat Active Course: Course with students and instructors enrolled that the instructor has "published" or made available to students Student: Students with Top Hat licenses enrolled in an "active course" Instructor: Instructors with Top Hat licenses enrolled in an "active course"
	Incidents Resolved by Learn@UW Madison	0	0	0	0	0	
	Incidents Resolved by Help Desk	3	0	0	0	3	
	Active Courses				35		Assessment Evaluation Feedback & Intervention System (AEFIS): CE Response Rate: Percentage of all potential student respondents that submitted an AEFIS course evaluation
	Unique Instructors				100		DESL Usage: Uses a direct evidence of student learning curriculum map at the program level and/or section level
AEFIS	Incidents Resolved by Learn@UW Madison	54	128	140	127	44	
	Incidents Resolved by Help Desk	2	9	20	54	4	
Honorlock	Total exams	28,818	15,652	32,471	35,123	143,400	Honorlock: Total exams: total exams proctored via Honorlock. If a class of 30 students takes 1 exam, it's counted as 30 total exams. Total courses: number of courses using Honorlock to proctor exams. Exams per student: Mean number of exams taken per student among students who use Honorlock for their course(s).
	Unique students	12,666	4,639	16,192	17,480	21,324	
	Total courses	196	39	219	250	345	
	Support tickets closed by Help Desk	36	16	6	5		
	Support tickets closed by Learn@UW-Madison	9	20	10	4		
LEAD	Exams per student	2	3	2	2	7	
	Total instructor views	74	164	79	16	14	Engage eText: electronic textbook provided by a publisher that students have access to during their UW student experience
	Support tickets closed by Help Desk					0	Digital learning tool (DLT): publisher-bundled electronic tools (such as question sets) associated with a print or digital text
	Instructor views of "Grades by Page Views" visualization	26	44	22	5	3	Student enrollment: Sum of student enrollment in all courses using an eText and/or Digital Learning Tool (not unique students)
	Instructor views of "Page Views by Date and Hour" visualization	24	51	25	5	4	Schools / Colleges: Number of schools and colleges that have a course using an eText and/or DLT
Engage eText	Instructor views of "Page Views by Activity Type" visualization	13	33	19	4	2	Departments: Number of departments that have a course using an eText and/or DLT
	Instructor views of "Home Page" visualization	11	36	13	2	5	Courses: Number of courses using an eText and/or DLT
	Support tickets closed by Learn@UW-Madison					3	Course sections: Number of course sections using an eText and/or DLT (some courses have multiple sections using digital texts and tools)
	% of students opted out					1	Unique instructor combos: Number of unique instructors plus number of unique teams of instructors in team-taught courses using a digital text and/or tool
	Course sections					178	% of students opting out: Percentage of enrolled students that choose not to use a digital text or tool
	Courses					84	
	Departments					35	
	Schools / Colleges					7	
	Student enrollment					18,780	
	Unique instructor combos					130	

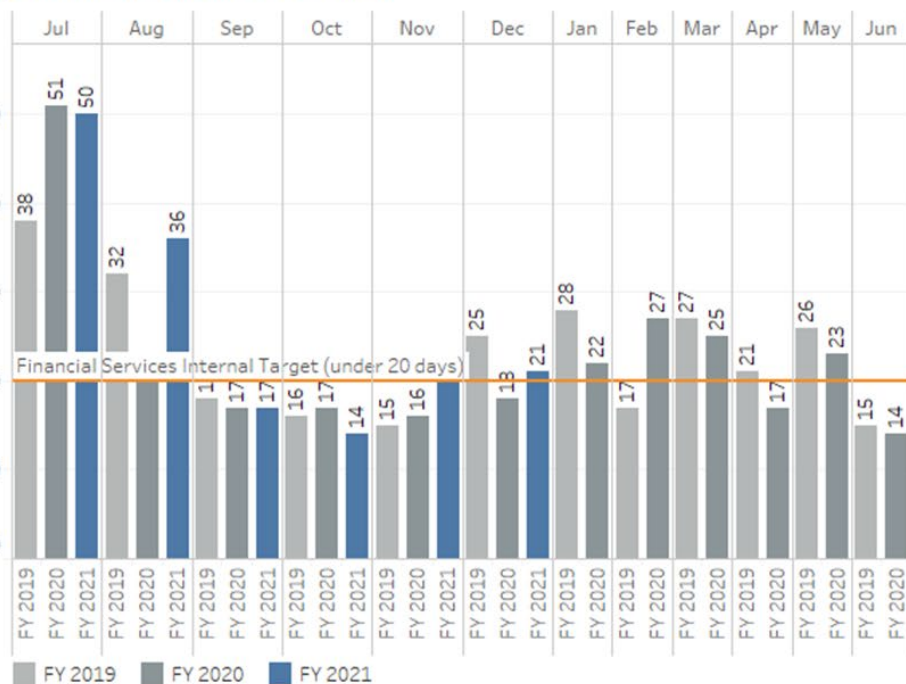
*As of winter semester 2020, TopHat has transitioned from monthly reporting to semester reporting.

DoIT OPERATIONS: FINANCIAL SERVICES

Average Number of Days to Pay: e-Reimbursement



Days from SFS Close to CBS Close



Days from CBS Close to Management Report Completion

	FY 2019	FY 2020	FY 2021
July	15	2	5
August	7	2	3
September	9	4	3
October	7	4	0
November	0	3	0
December	37	17	0
January	2	4	
February	6	2	
March	2	6	
April	6	7	
May	7	5	
June	5	5	

If blank, data is currently unavailable.

Days from SFS Close to Management Report Completion

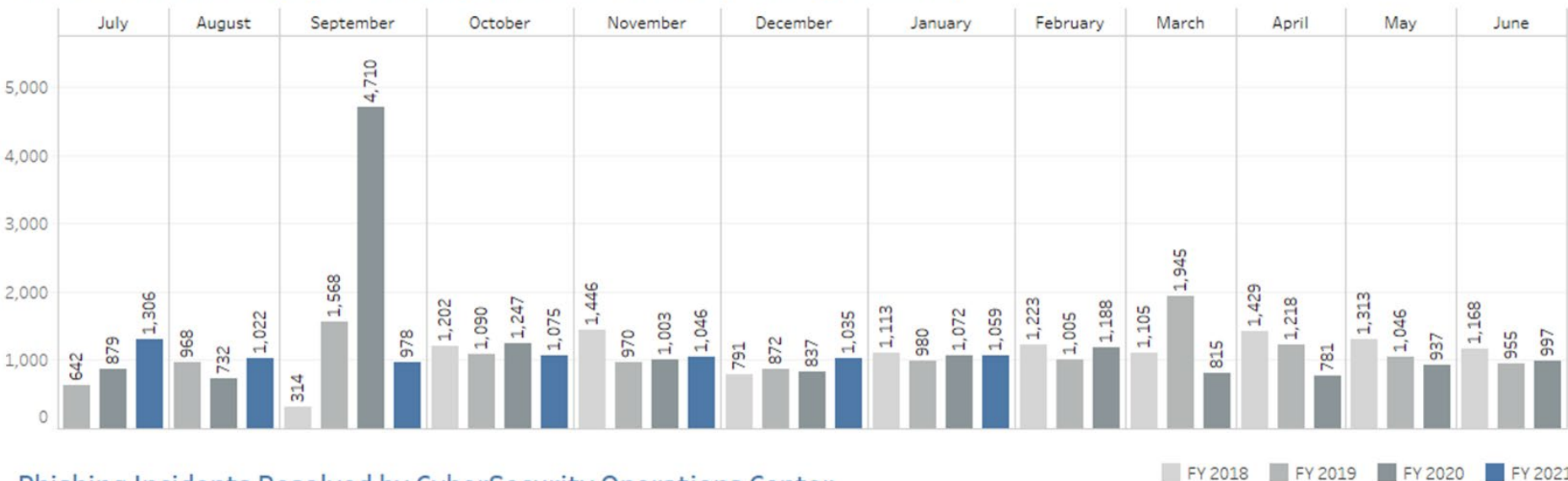
	FY 2019	FY 2020	FY 2021
July	53	53	55
August	39	22	39
September	27	21	20
October	23	21	14
November	15	19	20
December	62	35	23
January	30	26	
February	23	29	
March	29	31	
April	27	24	
May	33	28	
June	20	19	

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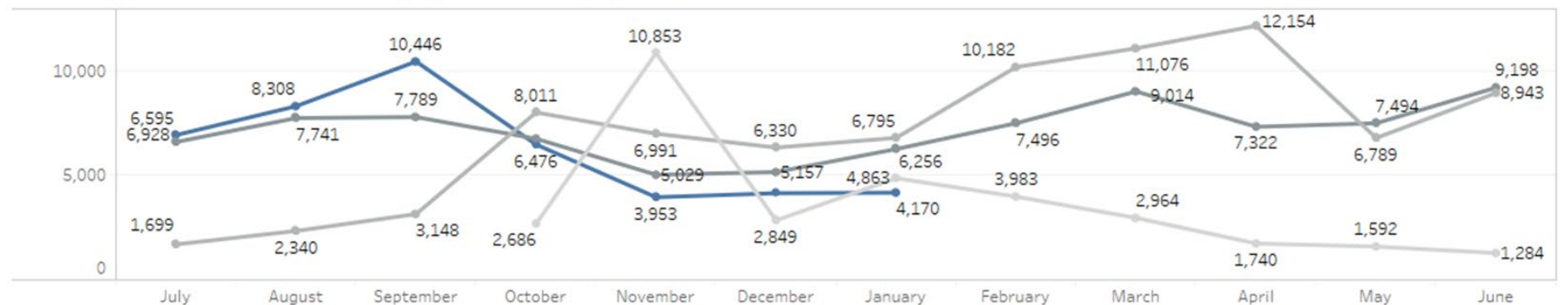


DoIT OPERATIONS: CYBERSECURITY - CYBERSECURITY OPERATIONS CENTER

Incidents Resolved by CyberSecurity Operations Center (Phishing excluded)



Phishing Incidents Resolved by CyberSecurity Operations Center



Incidents noted are from all sources. Phishing cases include spam, and are autogenerated via user reporting to abuse@wisc.edu.

This visualization was created by DoIT in the Department of User Services.



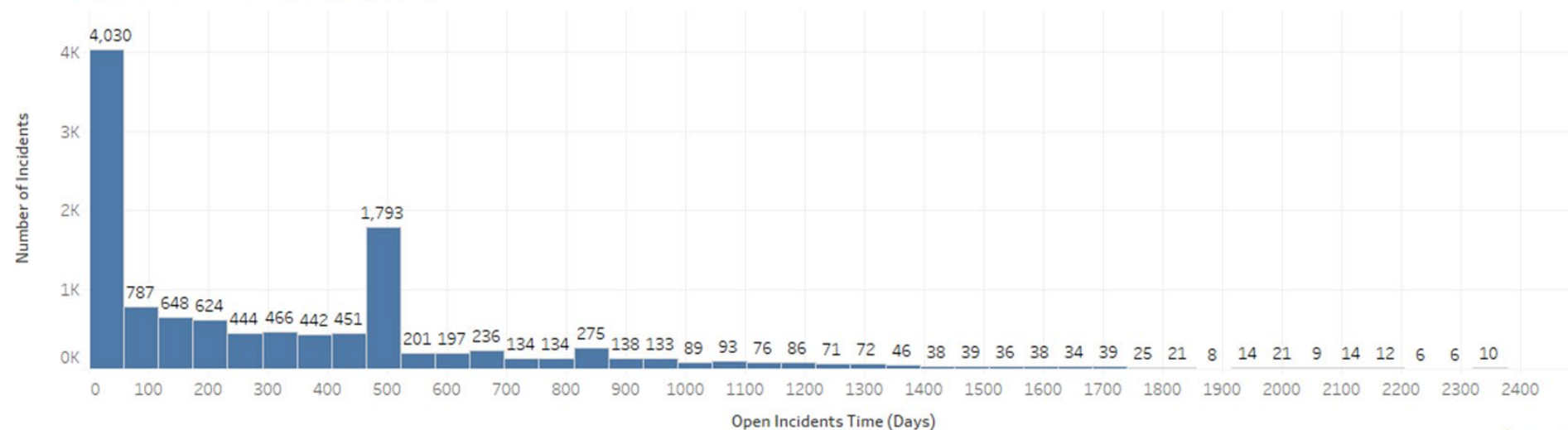
DoIT OPERATIONS: INCIDENT AGING REPORT

NOTE: Open incidents analyzed through 02/05/2021

Age of Open Incidents by Department

	Less Than 2 Days Old	Open Tickets > 2 Days and < 2 Weeks Old	Greater Than 2 Weeks Old	Greater Than 1 Month Old
AIS	50	261	334	224
Cybersecurity	160	320	2,292	2,183
NS	19	180	640	565
SEO	99	119	311	258
US	196	1,863	3,795	3,416
Other	46	234	1,466	1,414
Total	570	2,977	8,838	8,060

Total Open Incidents by Age (days)



DoIT Operations Report Monthly Updates

Gartner benchmarks have been updated on multiple pages from 2020 values to 2021 values. Gartner has changed their methodology to reporting median values, rather than average values.

DoIT OPERATIONS: TECHNICAL NOTES

HD: Walk-in created incidents are considered Help Desk incidents beginning in FY20 due to the merger between former Tech Store (Service Desk) and the Help Desk that began on July 1st, 2019.

HD-Overview: Cost per contact FY19 will be used due to a six month minimum to calculate the gartner benchmark. 2018 HDI Benchmarks will be used until the release of 2019 numbers.

HD-Benchmark Details: First Contact Resolution for Help Desk User Services has been defined as an incident opened by the Help Desk and resolved by the Help Desk, within one hour of the incident being created.

HD-Ivy: All chats are first handled by the AI, Ivy. If the AI is unable to answer a question or a user requests to speak to an agent, then the chat will be handed off to an available agent. If an agent is not available an email incident is created from the chat and sent to the Help Desk email queue. The color indicates where the chat ended; either with an agent or with the AI.

DS-Overview: Total number of endpoints that have been verified via IBM BigFix; within the past 45 days as of 11/5/2019

DS-SLA Response Rate: Priority matrix obtained from WiscIT. In Priority 1 cases, an entire department is unable to perform duties and there is no workaround available. Priority 2 cases involve one or multiple users being unable to perform duties without a workaround, or an entire department only able to perform partial duties. Priority 3 cases include an entire department or any number of its users being able to perform duties with a workaround, or one or multiple users being able to only perform partial duties. Priority 4 cases are for deferred cases or monitoring / tracking.

SEO-Service Availability: New services were added in March & April 2019

Active & Urgent Vulnerabilities: Number of active vulnerabilities with a severity of 4 or 5

Financial Services:

Average number of Days to Pay: E-reimbursement: Length of time, in days, from point that the requests enter the Financial Services queue to reimbursement payment to the employee. Note: this is a metric measured by campus, so we are using campus average as a point of comparison.

Days from SFS Close to CBS Close is the amount of days from Campus Financial close to DoIT CBS close.

Days from CBS Close to Management Report is the amount of days from DoIT CBS close to the DoIT Manager Report finalization.

Days from SFS Close to Management Report is the amount of days from Campus Financial close to the DoIT Manager Report finalization.

Cybersecurity-Cybersecurity Operation Center: Includes the following categories with noted exclusions: Compromised Credentials; Copyright (excl. Campus Network Housing subcategories); CSOC; DNS Block Request; Duo Fraud; e-Discovery; Investigation (excl. Missing Person); Phishing; Suspicious Activity Report (excl. Shadowserver).



DoIT OPERATIONS: TECHNICAL NOTES

Digital Publishing and Printing Services definitions

Rework: Work that needs to be reprinted due to operator error or miscommunication from internal staff.

Average Rework percentage: Derived percentage of total jobs requiring rework.

Sales: Monthly revenue from sale of print and print related projects.

Jobs: Total number print and print related projects per month.

Average on-time percentage by stream: Percentage of projects per production category completed by customer negotiated deadline.

Category Definitions

NetID Account Management: Password resets and NetID change requests

Office 365: Support for @wisc.edu email and Microsoft Apps

UW C/EX Support: Any incident from a Colleges or Extensions user

Referrals: Unsupported services referred to other departments

General Departmental Support: Incidents from departmentally supported users

BadgIRT: Incidents regarding security disabled accounts

Point of Sale (Tech Store): Any incident regarding the Tech Store

Campus Network: Connectivity issues to UW-Net and device registration

Learn@UW - Canvas Madison: Support to UW-Madison students & staff with Canvas

Multi-Factor Authentication (MFA): Support to UW-Madison students, faculty, and staff with the MFA

Learn@UW: A suite of centrally-supported technologies for instructional usage; used by instructors and/or students. Learn@UW includes the services reported on the previous page and other learning technologies.



DoIT INCIDENT AGING REPORT - TECHNICAL NOTES

Incidents in the 'Greater Than 1 Month Old' column are also included in the 'Greater Than 2 Weeks Old' column.

WiscIT Teams in Each Department

AIS

Active Directory, ADI-IA Student Data Integration, ADI-Internal Apps, ADI-Web and Mobile Solutions, ECRT, ECS-Equipment Checkouts, IAM, Manifest Grouping Email, Manifest-Grouping, Manifest-Grouping Email, MiddleWare, Middleware Temp, Multi-Factor Authentication, MyUW, NetID-AcctAdmin, NetID-Login, Server Certificate Service, Shared Tools, Shared Web Hosting, UW Digital ID, UW KnowledgeBase, WiscWeb CMS, WiscWeb CMS Developers

Cybersecurity

Security, Security Incident, Security-Authorize, Security-BADGIRT, Security-CSOC Review, Security-Dept, Security-GRC, Security-HRS Attestation, Security-IT Access, Security-OCIS, Security-Tools

NS

NS-App Admins, NS-Apps AANTS, NS-Campus, NS-Dept, NS-Field Services, NS-Field Services-Voice, NS-Firewall, NS-Layer 4, NS-OpEng, NS-OpEng-Monitoring, NS-PCI, NS-Video, NS-Voice, NS-Voice-Cellular, NS-Voice-Cisco, NS-Voice-EUC, NS-Voice-Legacy, NS-WAN, SA-NS

SEO

DRMT-All, DRMT-Data Tools, DRMT-Database, DRMT-DBA, DRMT-Enterprise Tools, DRMT-InfoAccess, DRMT-Tools, SA-SE, SA-Virtualization, SE, SE-AD, SE-AIX, SE-Audit, SE-BuckyBackup Support, SE-Critical Infrastructure, SE-DSA, SE-Linux, SE-OSX, SE-Solaris, SE-Storage Team, SE-Virtualization, SE-Windows, SEO-Dept, SEO-Firewall, SEO-Mainframe, SNCC-Network, SNCC-NTN-ND, SNCC-SysNet, SNCC-Sysops, SNCC-Systems Management

US

KB Site Helpdesk, Logistics, O365 Technical/Functional, PCS-Dept, PCS-o365 Service Delivery, PCS-Shared Hosting, SA-RaDS, US-Dept, US-DS, US-DS Andover, US-DS Application Support, US-DS Big Fix, US-DS Desktop Bascom, US-DS Desktop Contract, US-DS Desktop DEM, US-DS Desktop DoIT, US-DS Desktop RSO, US-DS Desktop UCOMM-UMARK, US-DS Desktop WGNHS, US-DS EMS, US-DS Endpoint Management, US-DS GDS Student, US-DS Kiosks, US-DS Office 365 OSC, US-DS Operations, US-DS PCI, US-DS SAS, US-DS SEAM, US-DS Select Agent Labs, US-DS Service Leads, US-DS SOAR, US-Help Desk, US-Help Desk ALF/PAF, US-Help Desk Closure, US-Help Desk Development, US-Help Desk EAST, US-Help Desk EAST DS, US-Help Desk Email, US-Help Desk Email Test, US-Help Desk HDQA, US-Help Desk Internal, US-Help Desk Operations, US-Help Desk SMPH Support, US-Help Desk Tools, US-Help Desk UW C/EX Support, US-Help Desks UW CEOEL Support, US-Infolabs Kiosks, US-Metrics and Data, US-PM, US-PM Apple, US-PM Dell, US-PM Hardware, US-PM Mathat&StatsPKGS, US-PM Software, US-Repair Billing, US-Repair Hardware, US-Repair Internal, US-Repair Parts, US-Repair Pickup (333ECM), US-Repair Pickup (Comp Sci), US-Repair Pickup (HSLC), US-Repair Printer, US-Repair Software, US-Service Desk (HSLC), US-Repair Printer, US-Repair Software, US-Service Desk

Other

All remaining DoIT WiscIT teams that are not included in the above lists.



This visualization was created by DoIT in the Department of User Services.