



## **DoIT Operations Monthly Report**

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# November 2020

Published January 11, 2020



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## DoIT OPERATIONS: Applications Infrastructure Services SERVICE AVAILABILITY

Last 12 months

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

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.



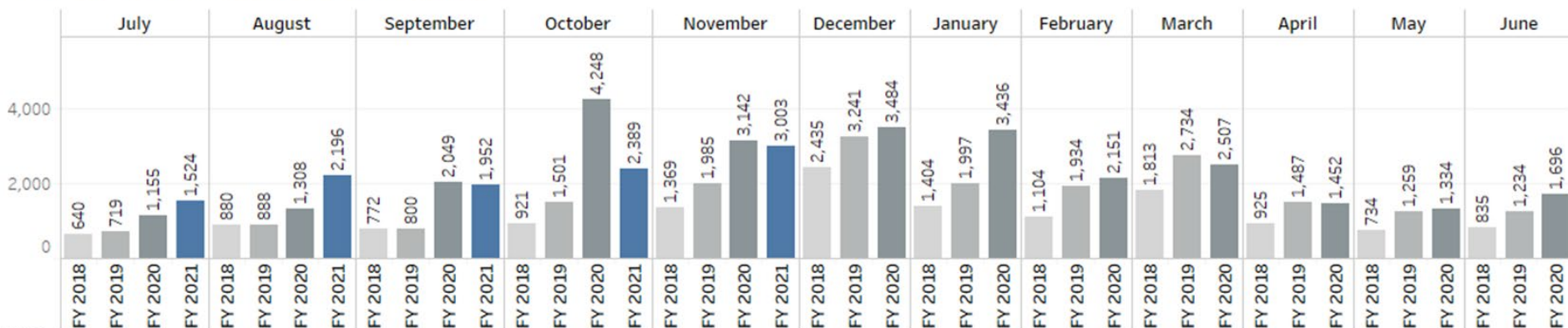
This visualization was created by DoIT in the Department of User Services.

## DoIT OPERATIONS: IAM SERVICES OVERVIEW

### Help Desk Resolution Rates for IAM Services During November

	All Incidents	% of Incidents	Incidents Created by HD	Resolved by HD	* HD % Resolution	*** First Contact Resolution Rate	** Customer Satisfaction	
Multi-factor Authentication (MFA)	1,072	30.5%	1,064	1,010	94.2%	94.7%	95.2%	IAM Target: HD % Resolution ■ At or above 85.0%
NetID Account Management	1,889	53.7%	1,874	1,767	93.5%	86.9%	97.9%	2020 Gartner Benchmark: First Contact Resolution ■ Above 74.0%
All IAM Incidents	3,516	100.0%	3,003	2,830	93.3%	89.6%	96.9%	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.

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



## DoIT OPERATIONS: AIS-Web Platform Services

### Help Desk Resolution Rates for WPS Services During November

	All Incidents	% of Incidents	Incidents Created by HD	Resolved by HD	* HD % Resolution	*** First Contact Resolution Rate	** Customer Satisfaction
MyUW Madison/System	136	36.6%	134	114	★ 83.6%	85.3%	★ 84.6%
UW Madison Knowledgebase (KB)	34	9.1%	3	1	★ 33.3%	100.0%	
Web Hosting	123	33.1%	6	3	50.0%		100.0%
WiscWeb	74	19.9%	71	30	★ 42.3%	★ 60.0%	91.6%
Shared Tools	5	1.3%					

AIS-WPS Targets:  
HD % Resolution by Service

MyUW Madison/ System - 85%  
Shared Tools - 15%  
UW Madison Knowledgebase - 10%  
Web Hosting - 5%  
WiscWeb - 45%

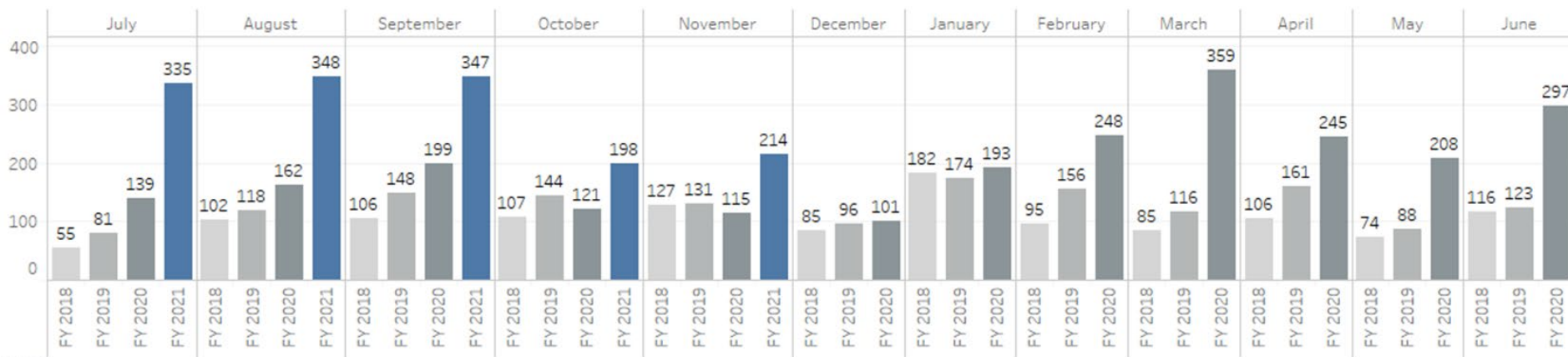
2020 Gartner Benchmark:  
First Contact Resolution

Below 74.0% ★  
Above 74.0% ★

WPS Services Target:  
Customer Satisfaction

At or above 85.0% ★  
Below 85.0% ★

### 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.

\*\*\* 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.

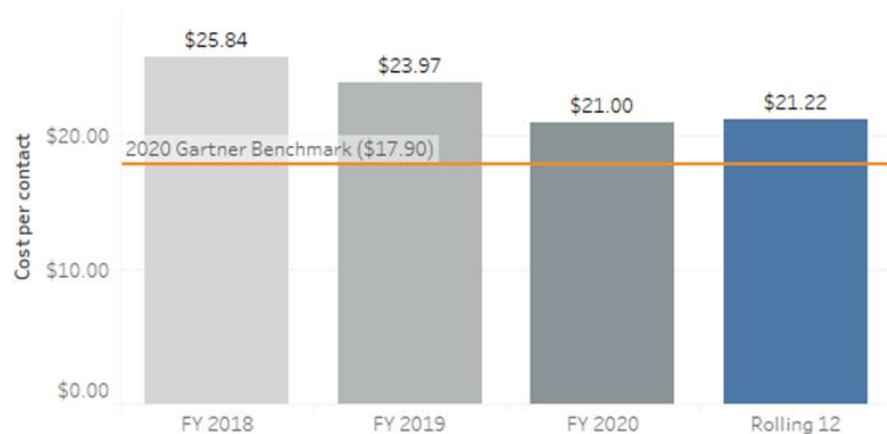
This visualization was created by DoIT in the Department of User Services.



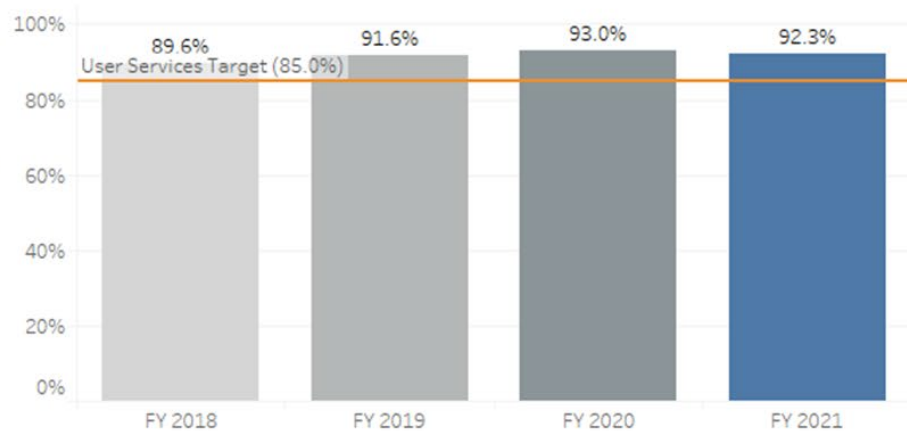


## DoIT OPERATIONS: US-HELP DESK OVERVIEW

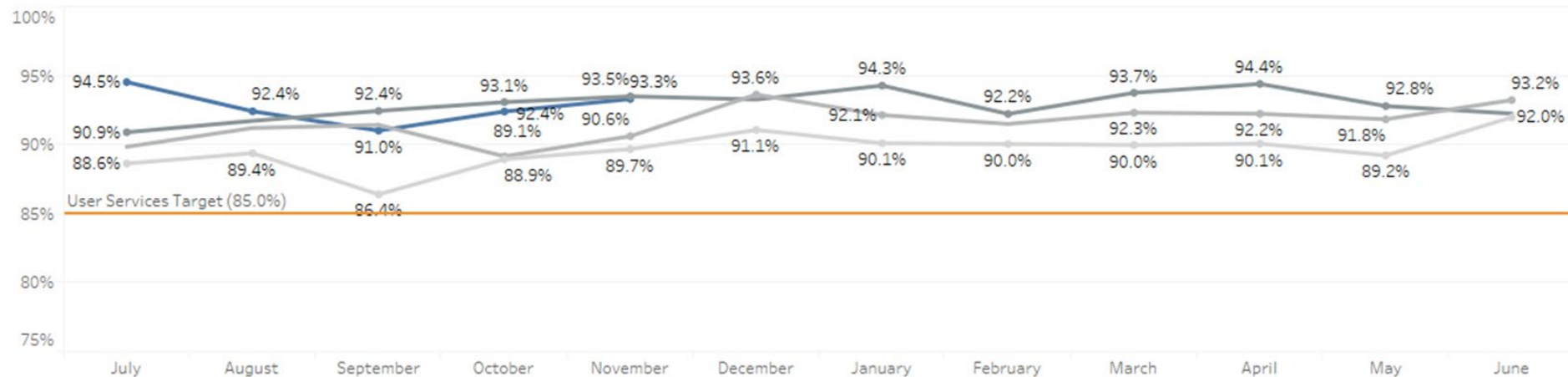
### Cost per Contact



### \* 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?"

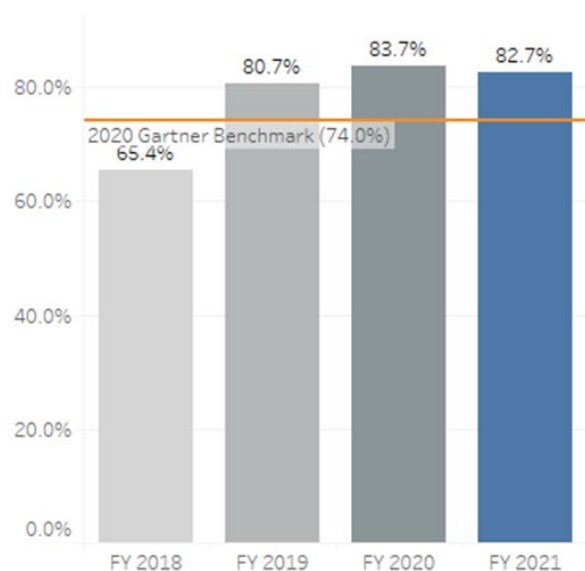
\*HDI has changed their measure of Customer Satisfaction sufficiently to warrant transitioning away from that benchmark. Until a suitable benchmark can be located and evaluated, we have set a User Services target.

Gartner 2019 Benchmark Cost Per Contact is \$16.30.

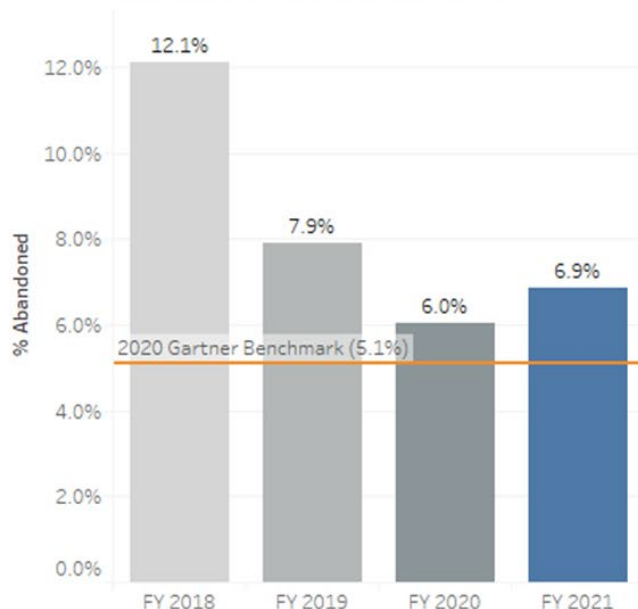


This visualization was created by DoIT in the Department of User Services.

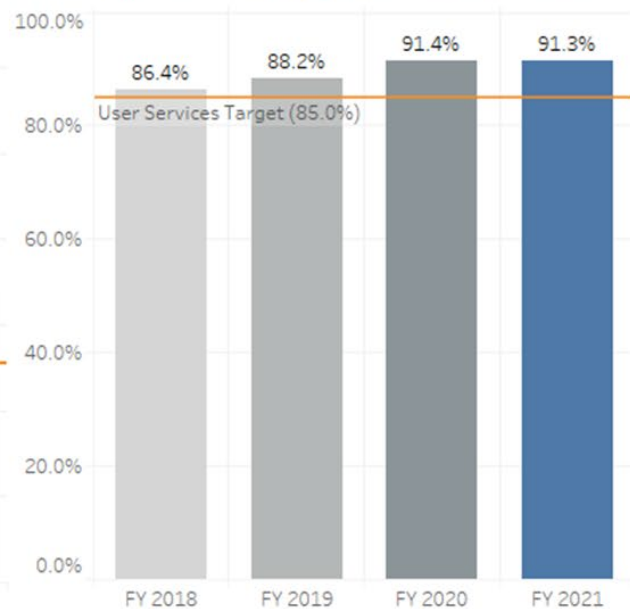
**\*Help Desk Average First Contact Resolution**



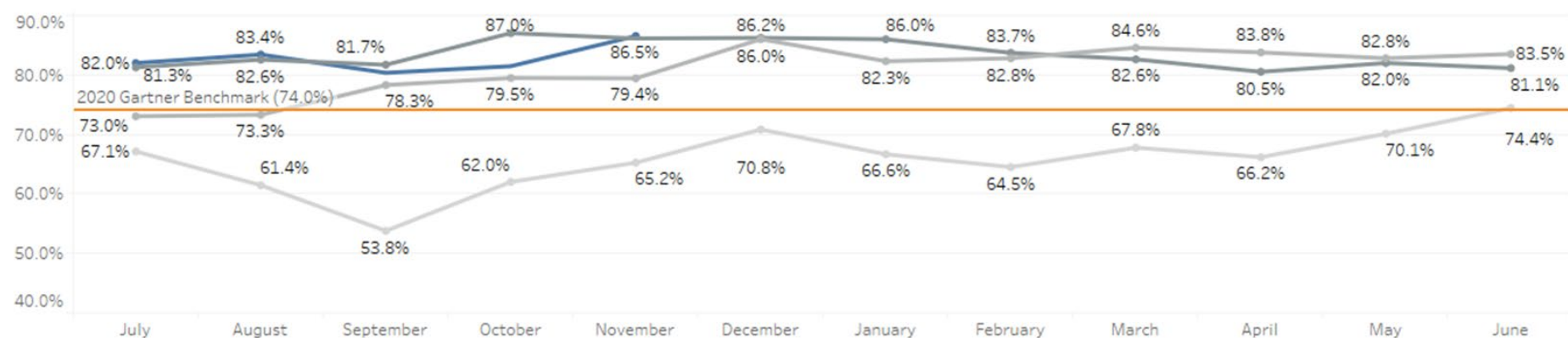
**Help Desk Abandonment Rate**



**\*\*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.

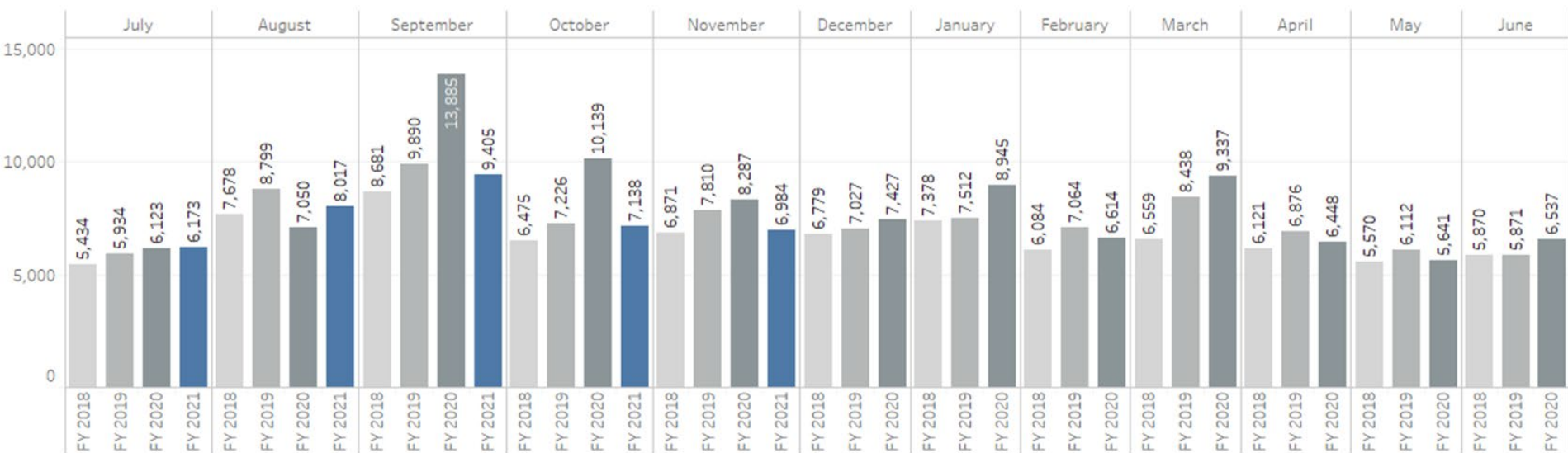
Gartner 2019 Benchmark Abandonment Rate is 7.4% and First Contact Resolution is 70.6%.

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

## Help Desk Resolution Rates for Top 10 Supported-Services in November

	Incidents Created by HD	% of Incidents	HD Resolved	** HD % Resolved
NetID Account Management	1,874	26.8%	1,753	93.5%
Multi-factor Authentication (MFA)	1,064	15.2%	1,004	94.4%
Referrals	538	7.7%	501	93.1%
Office 365	499	7.1%	411	★ 82.4%
UW-Madison Zoom	237	3.4%	203	85.7%
Learn@UW - Canvas Madison	201	2.9%	156	★ 77.6%
Personal Software Support	162	2.3%	148	91.4%
Incident Response and Investigations, BadgIRT (Security)	158	2.3%	71	★ 44.9%
DoIT Departmental Support, Software	143	2.0%	86	★ 60.1%
MyUW Madison	121	1.7%	99	★ 81.8%

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.



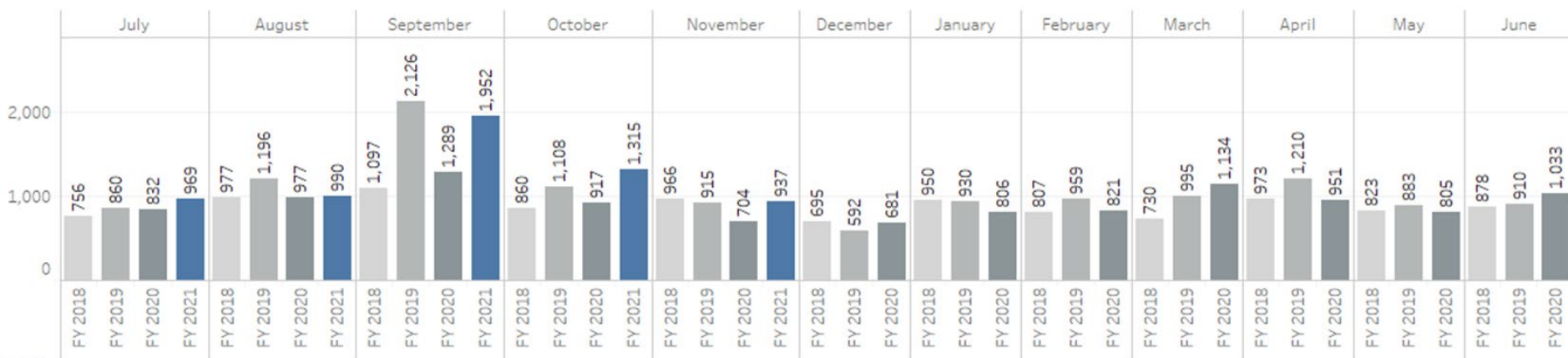


## DoIT OPERATIONS: US-PRODUCTIVITY AND COLLABORATION SERVICES OVERVIEW

### Resolution Rates for PCS Services During November

	All Incidents	% of Incidents	Incidents Created by HD	Resolved by HD	* HD % Resolution	*** First Contact Resolution Rate	** Customer Satisfaction	
Office 365	512	49.2%	499	418	★ 82.4%	75.7%	92.0%	User Services Target: HD% Resolution
UW-Madison Zoom	284	27.3%	237	204	85.7%	77.1%	91.2%	■ At or above 85.0%
UW-Madison Box	87	8.4%	65	47	85.3%	100.0%	94.3%	■ Below 85.0% ★
UW-Madison Google Apps	72	6.9%	68	60	★ 72.3%	89.5%	87.1%	2020 Gartner Benchmark: First Contact Resolution
WisconsinList	54	5.2%	44	33	★ 75.0%	92.3%	100.0%	■ Below 74.0% ★
Qualtrics	24	2.3%	16	16	93.8%	★ 60.0%	100.0%	■ Above 74.0%
Cloud Fax	8	0.8%	8	3	★ 37.5%	100.0%		User Services Target: Customer Satisfaction
								■ At or above 85.0%

### 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.

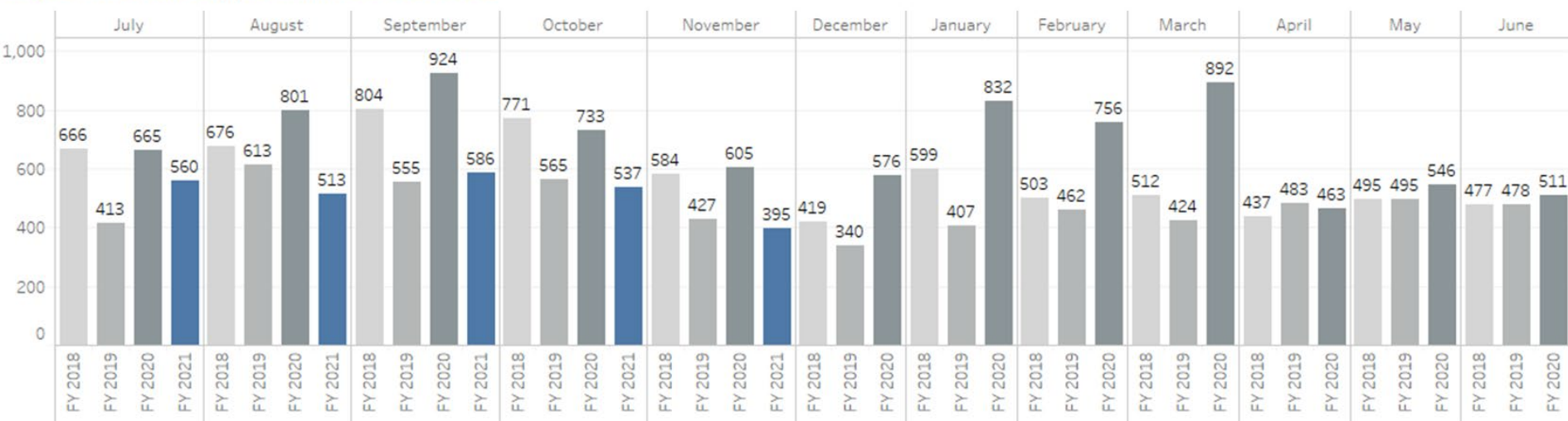
\*\*\* First Contact Resolution has been defined as a phone incident opened by the Help Desk and resolved by the Help Desk, within one hour of the incident being created. As only phone incidents are looked at this metric may be blank if no phone incidents were reported for that service during the previous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

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

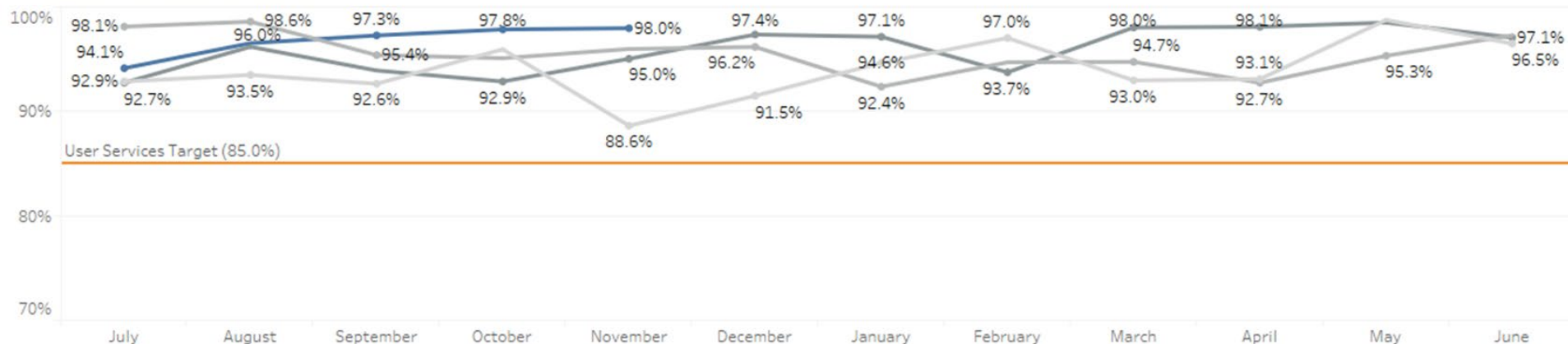


## DoIT OPERATIONS: US-DEPARTMENTAL SUPPORT OVERVIEW

### 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

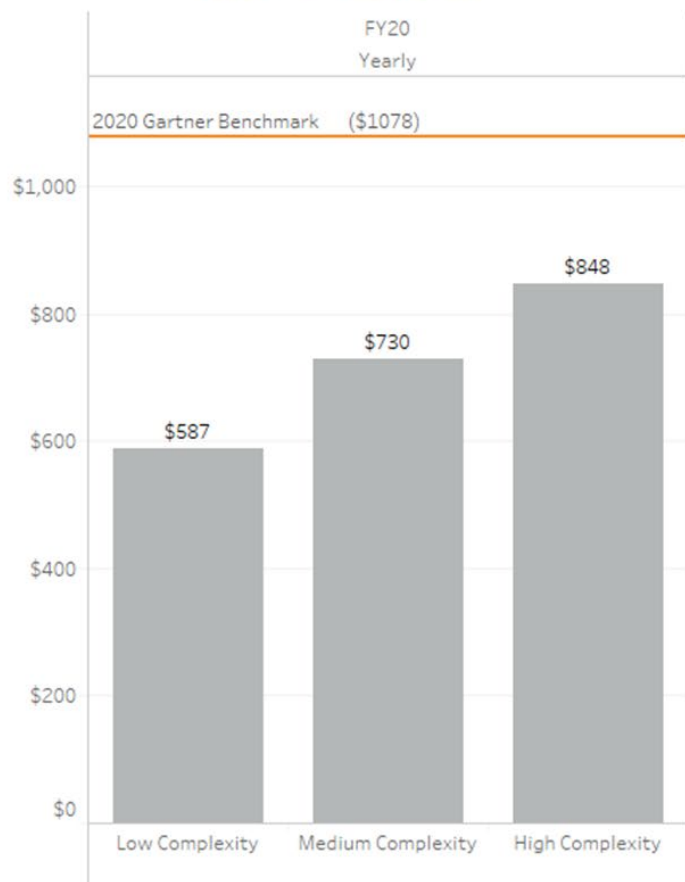
HDI has changed their measure of Customer Satisfaction sufficiently to warrant transitioning away from that benchmark. Until a suitable benchmark can be located and evaluated, we have set a User Services target.

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

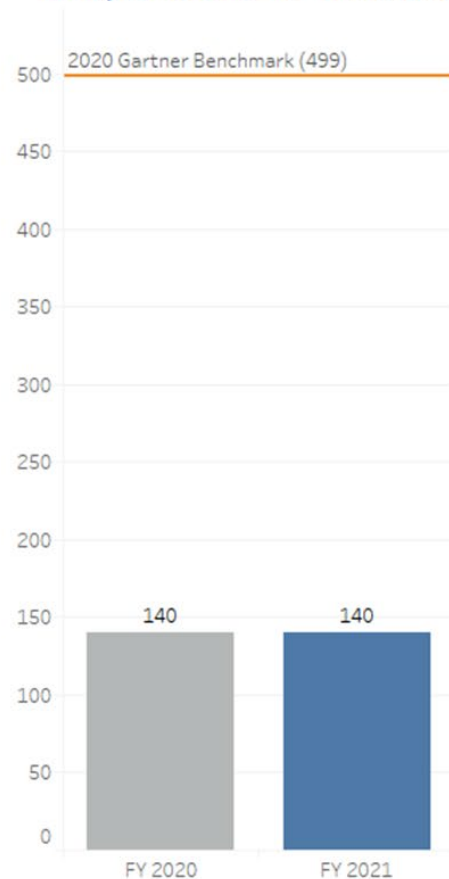


## DoIT OPERATIONS: US-DEPARTMENTAL SUPPORT METRICS

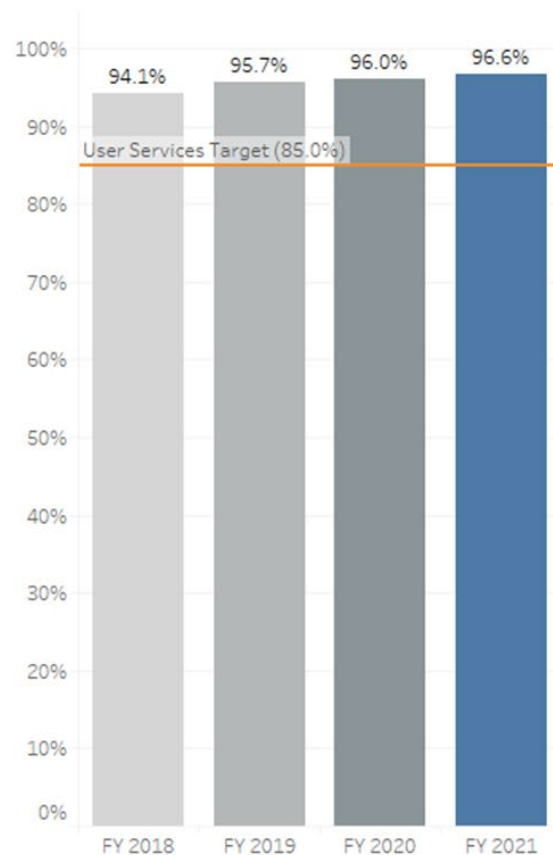
\* Cost Per Endpoint



\*\* Endpoints Per Technician



\*\*\* Customer Satisfaction



The price per endpoint calculation uses representative contracts to demonstrate 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 due to a six-month minimum to capture the 2020 Gartner benchmark.

\*\*2020 Gartner Benchmarks include printers. We are exploring the ramifications for our reporting methods. 2019 Gartner benchmark was 283 Endpoints per Technician. Updated July 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.



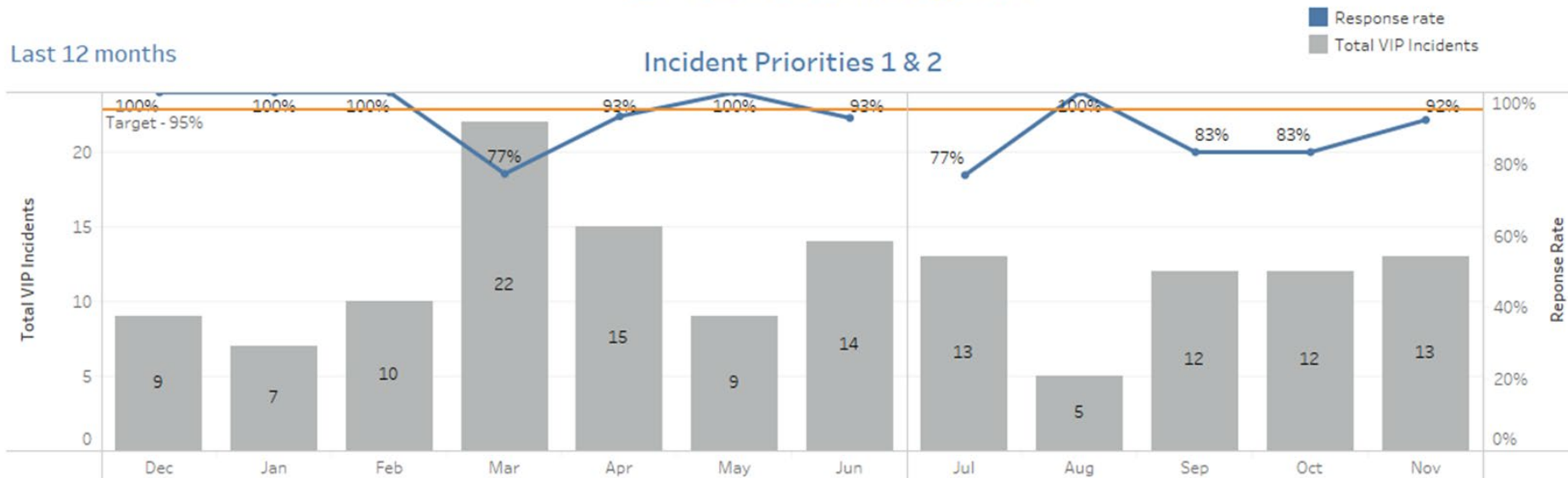
This visualization was created by DoIT in the Department of User Services.

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

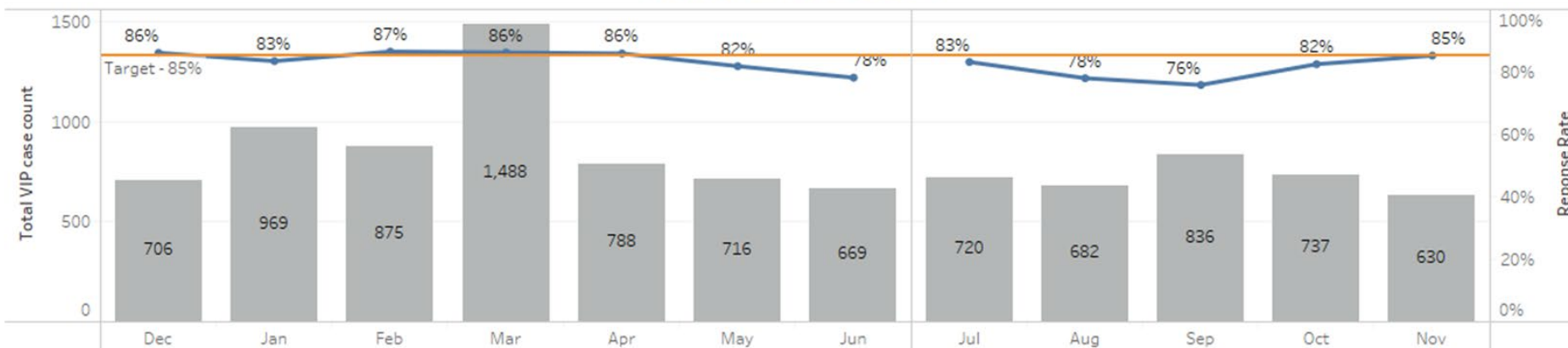
SLA = One hour acknowledgement

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	December %	January %	February %	March %	April %	May %	June %	July %	August %	September %	October %	November %
HRS	99.000%	★ 98.562	100.000	99.603	100.000	99.313	100.000	★ 98.935	100.000	100.000	★ 91.271	★ 96.013	100.000
SFS	99.000%	99.943	99.918	99.968	99.941	99.989	99.464	100.000	100.000	100.000	100.000	100.000	99.799
SIS	99.000%	99.893	99.594	100.000	100.000	99.998	100.000	100.000	100.000	99.953	100.000	100.000	100.000
Informatica (FASTAR)	99.000%	★ 98.253	★ 98.356	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
UWBI (OBIEE)	98.000%	★ 97.984	★ 97.260	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	★ 98.904	★ 98.904	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	September %	October %	November %	Network	Target	Septemb.. %	October %	November %	Network	Target	September %	October %	November %
Upham Woods	99.900%	99.949	99.922	★ 98.059	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	99.970	100.000	UWC Marathon Co.	99.900%	100.000	99.970	100.000
UW Eau Claire	99.900%	100.000	100.000	100.000	UW Stevens Point	99.900%	100.000	99.970	100.000	UWC Marinette	99.900%	★ 99.393	99.970	100.000
UW Green Bay	99.900%	100.000	99.970	100.000	UW Stout	99.900%	100.000	99.970	100.000	UWC Marshfield Wood Co.	99.900%	100.000	99.961	100.000
UW Health	99.900%	100.000	100.000	100.000	UW Superior	99.900%	100.000	99.970	100.000	UWC Richland	99.900%	99.984	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	99.970	100.000
UW Madison	99.900%	100.000	99.970	100.000	UWC Baraboo Sauk Co.	99.900%	100.000	★ 99.480	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	99.970	100.000	UWC Washington Co.	99.900%	100.000	100.000	100.000
UW Oshkosh	99.900%	100.000	99.970	100.000	UWC Fond du Lac	99.900%	100.000	100.000	100.000	UWC Waukesha	99.900%	100.000	99.970	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-Sep	20-Oct	20-Nov
<b>UW-Madison campus</b>	Avg (Gb/sec)	7.90	7.70	7.60
	Max (Gb/sec)	19.70	17.50	16.30
	Min (Gb/sec)	1.90	1.90	1.70
	% of full capacity (100Gbps)	7.90	7.70	7.60
<b>UW-Madison research</b>	Avg (Gb/sec)	15.60	13.60	16.20
	Max (Gb/sec)	47.10	60.30	90.30
	Min (Gb/sec)	5.70	4.90	6.20
	% of full capacity (100Gbps)	15.60	13.60	16.20
<b>Internet Exchange (MadIX)</b>	Avg (Gb/sec)	6.20	6.10	6.90
	Max (Gb/sec)	12.90	11.90	13.40
	Min (Gb/sec)	0.50	0.00	0.00
	% of full capacity (20Gbps)	31.00	30.50	34.50

### OUT

		20-Sep	20-Oct	20-Nov
<b>UW-Madison campus</b>	Avg (Gb/sec)	2.40	2.50	2.50
	Max (Gb/sec)	4.70	14.70	14.20
	Min (Gb/sec)	1.20	1.10	0.91
	% of full capacity (100Gbps)	2.40	2.50	2.50
<b>UW-Madison research</b>	Avg (Gb/sec)	17.90	16.30	15.90
	Max (Gb/sec)	60.30	54.00	60.20
	Min (Gb/sec)	5.40	4.70	4.50
	% of full capacity (100Gbps)	17.90	16.30	15.90
<b>Internet Exchange (MadIX)</b>	Avg (Gb/sec)	7.20	6.60	6.60
	Max (Gb/sec)	13.20	10.70	10.50
	Min (Gb/sec)	2.10	0.00	0.00
	% of full capacity (20Gbps)	36.00	33.00	33.00

-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: 4211

	Target	December	January	February	March	April	May	June	July	August	September	October	November
Access Points Avg. Uptime per Day	99.50%	99.89%	99.81%	99.73%	99.73%	★ 99.48%	★ 99.16%	★ 99.14%	★ 99.20%	★ 98.97%	★ 98.56%	★ 98.51%	★ 98.47%
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%	100.00%	100.00%

Avg. Number of APs Down per Day		31.58	23.87	26.55	26.52	41.23	53.65	56.27	56.61	76.42	89.10	88.65	77.53
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### Airwave 2

Total Controllers: 8  
Total APs: 4684

	Target	December	January	February	March	April	May	June	July	August	September	October	November
Access Points Avg. Uptime per Day	99.50%	99.98%	99.92%	99.96%	99.92%	99.92%	99.83%	★ 99.45%	★ 99.37%	99.71%	99.84%	99.80%	99.77%
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		11.23	16.90	7.97	19.42	21.57	46.71	33.27	34.48	27.42	14.10	15.87	29.60
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### Airwave 3

Total Controllers: 4  
Total APs: 2796

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

Avg Number of APs Down per Day			6.61	1.59	1.52	14.50	5.65	9.77	9.29	25.81	15.77	18.94	11.50
--------------------------------	--	--	------	------	------	-------	------	------	------	-------	-------	-------	-------

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.

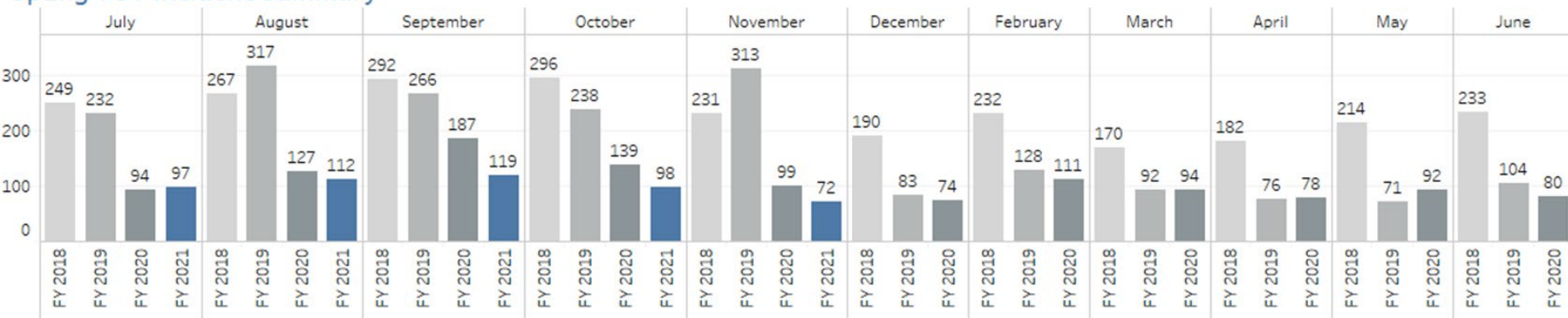


## DoIT OPERATIONS: OPERATIONS ENGINEERING INCIDENT SUMMARY

### Four Months Incident Summary by Subcategory

		August	September	October	November
Campus Network	AANTS	5	4	2	5
	Bandwidth Threshold Alarm	2	1	3	3
	Firewall/Problem		2	5	1
	Firewall/Rules	1	2	1	4
	Port Error Threshold Alarm		1	1	1
	Request/Data Jack/Activation	6	1	2	1
	Request/Data Jack/Installation	1			
	Request/DHCP	2	4	3	
	Request/DNS/Hostmaster	1	1	3	
	Request/DNS/Network Services	15	5	16	10
	Request/Equipment Installation		1	1	1
	Request/Hardware	7	4	2	3
	Request/IP Allocation	24	35	19	14
	Video				1
	Wired Network Issue	2	8	12	3
	Wireless	6	14	9	9
	Wireless Device Registration	2	1	1	
	Device Registration HAP	21	18	6	4
	HAP Reset		1	1	1
Campus Network Ho..	Latency or Packet Drop		1		3
VPN	Client Issue	1	1		2
	Submit Incident	14	11	9	3
eduroam	Submit Incident			1	1
	Troubleshooting				1
Others		3	3	1	1
Grand Total		113	119	98	72

### 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	December %	January %	February %	March %	April %	May %	June %	July %	August %	September %	October %	November %
Bucky Backup	99.000%	100.000	100.000	100.000	99.870	99.386	100.000	100.000	100.000	99.615	★95.769	★98.329	99.188
Campus Card Access	99.500%	★97.749	100.000	★98.904	100.000	100.000	100.000	100.000	100.000	99.617	100.000	100.000	100.000
Campus Computing Infrastructure	99.500%	100.000	100.000	100.000	100.000	100.000	99.989	100.000	100.000	100.000	100.000	100.000	★99.477
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%	99.966	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%	98.925	★97.233	★96.244	100.000	99.921	99.921	100.000	99.664	100.000	100.000	100.000	99.799
Select Agent	99.900%	100.000	100.000	100.000	100.000	100.000	★97.258	100.000	100.000	100.000	100.000	100.000	100.000
Storage	99.900%	100.000	100.000	100.000	★95.616	100.000	100.000	100.000	★98.132	100.000	100.000	100.000	100.000
Video Monitoring System	99.900%	100.000	100.000	100.000	100.000	100.000	100.000	100.000	99.973	100.000	100.000	100.000	100.000
WiscIT (Cherwell)	99.500%	100.000	★97.320	100.000	100.000	100.000	100.000	99.944	99.630	100.000	100.000	★86.962	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 2020 Average Servers/FTE
Windows	99.950	99.970	338	88	112.7	279.0
Linux	99.950	99.990	443	151	147.7	268.0

### Top Customers By Percentage of Labor Hours

DoIT - Public Cloud Service	1	(18.30%)
DoIT Internal Customers	2	(13.40%)
DoIT - Microsoft SQL Server Hosting	3	(6.90%)
HRS	4	(3.00%)
UWPD	5	(2.80%)
SFS	6	(2.30%)
Globus	7	(1.50%)
WHS	8	(1.10%)
UW Communications	9	(0.90%)
Work to support prospective customers	10	(0.70%)
InfoAccess	10	(0.70%)
Vulnerability Management	10	(0.70%)

### Top Customers By Server Count

Cybersecurity	1	(84 Servers)
SFS, HRS	2	(80 Servers)
Identity and Access Management	3	(54 Servers)
DoIT Web Platform Services	4	(42 Servers)
Student Information System	5	(38 Servers)
SysNet	6	(37 Servers)
Database Aggregation (FASTAR)	7	(25 Servers)
Office 365	8	(24 Servers)
Imaging	8	(24 Servers)
DoIT Service Management	10	(20 Servers)
Wisconsin Historical Society	10	(20 Servers)

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

## DoIT OPERATIONS: SOLUTIONS ENGINEERING VULNERABILITIES SUMMARY

### Four Months Vulnerability Summary

Type	Severity	August	September	October	November
Potential Vulnerability	1	1	1	1	2
	2	3	6	4	1
	3	8	16	32	36
	4	1	1		1
Vulnerability	1	9	13	77	13
	2	28	4	145	112
	3	770	115	580	2,028
	4	828	141	1,020	2,490
	5	509	89	125	543
Vulnerability or Potential Vulnerability	2				2
	3	5	8	6	4
	4	2	2	7	10
	5	3	3		1
Grand Total		2,167	399	1,997	5,243

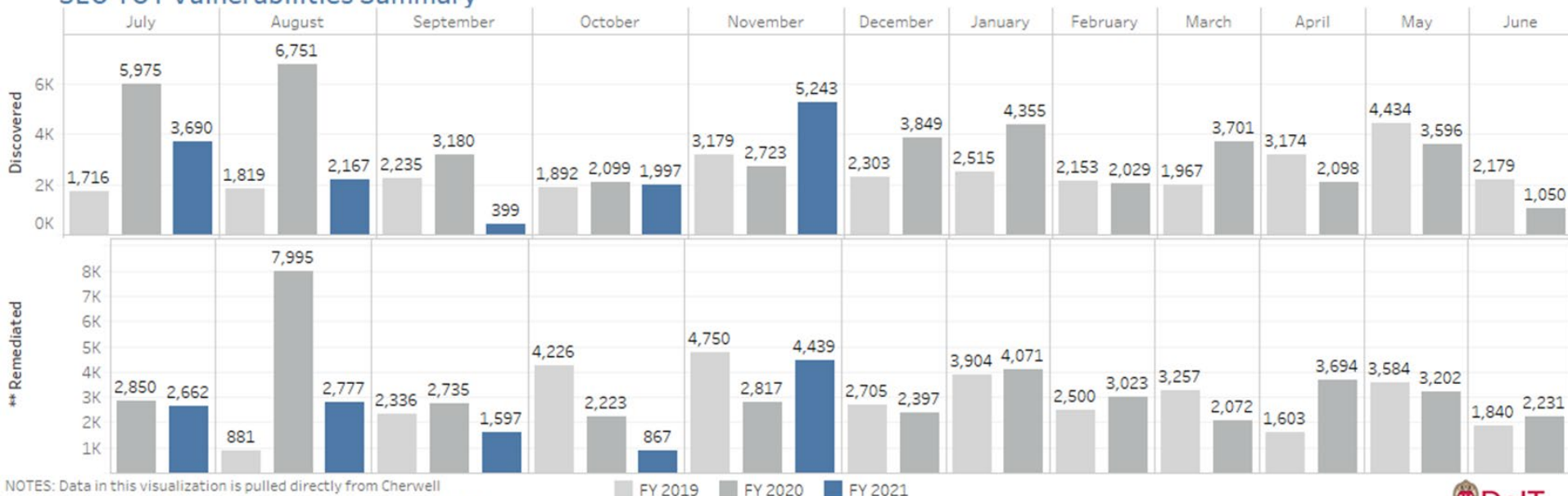
\*Active & Urgent Vulnerabilities

102

Remaining From November

1

### 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

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

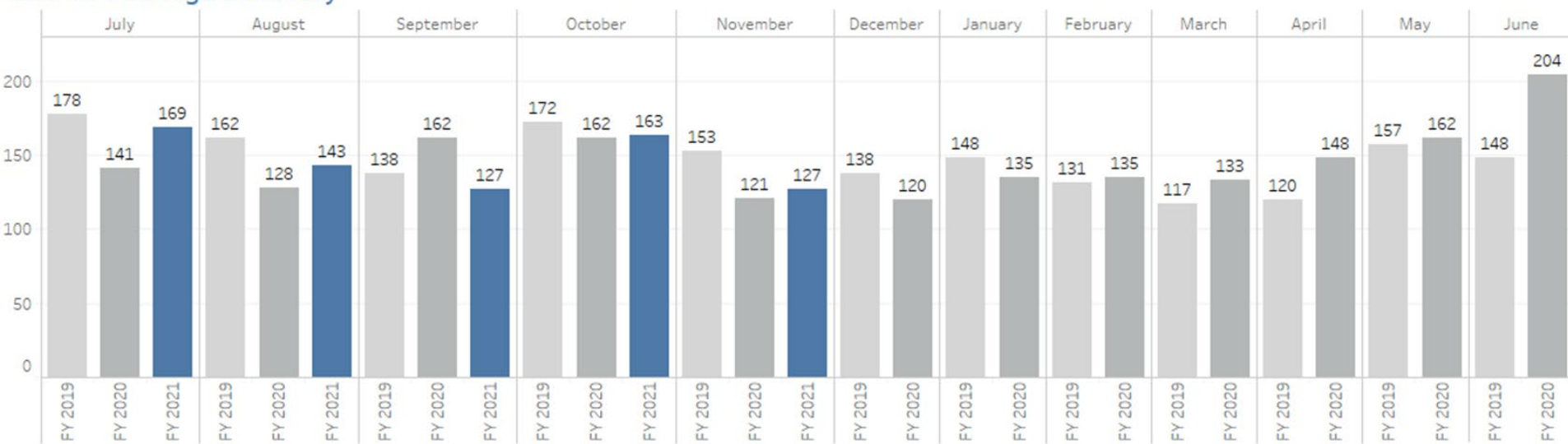


## DoIT OPERATIONS: SYSTEMS & NETWORK CONTROL CENTER

### \* Four Months Network Problem Summary

Technical Service	August	September	October	November
Boreas	12	6	8	13
Campus Network	104	79	71	96
MUFN	5	1	4	5
Northern Tier	1	1	1	3
UW SysNET	15	8	14	15
Grand Total	137	95	98	132

### SEO YOY Outage Summary

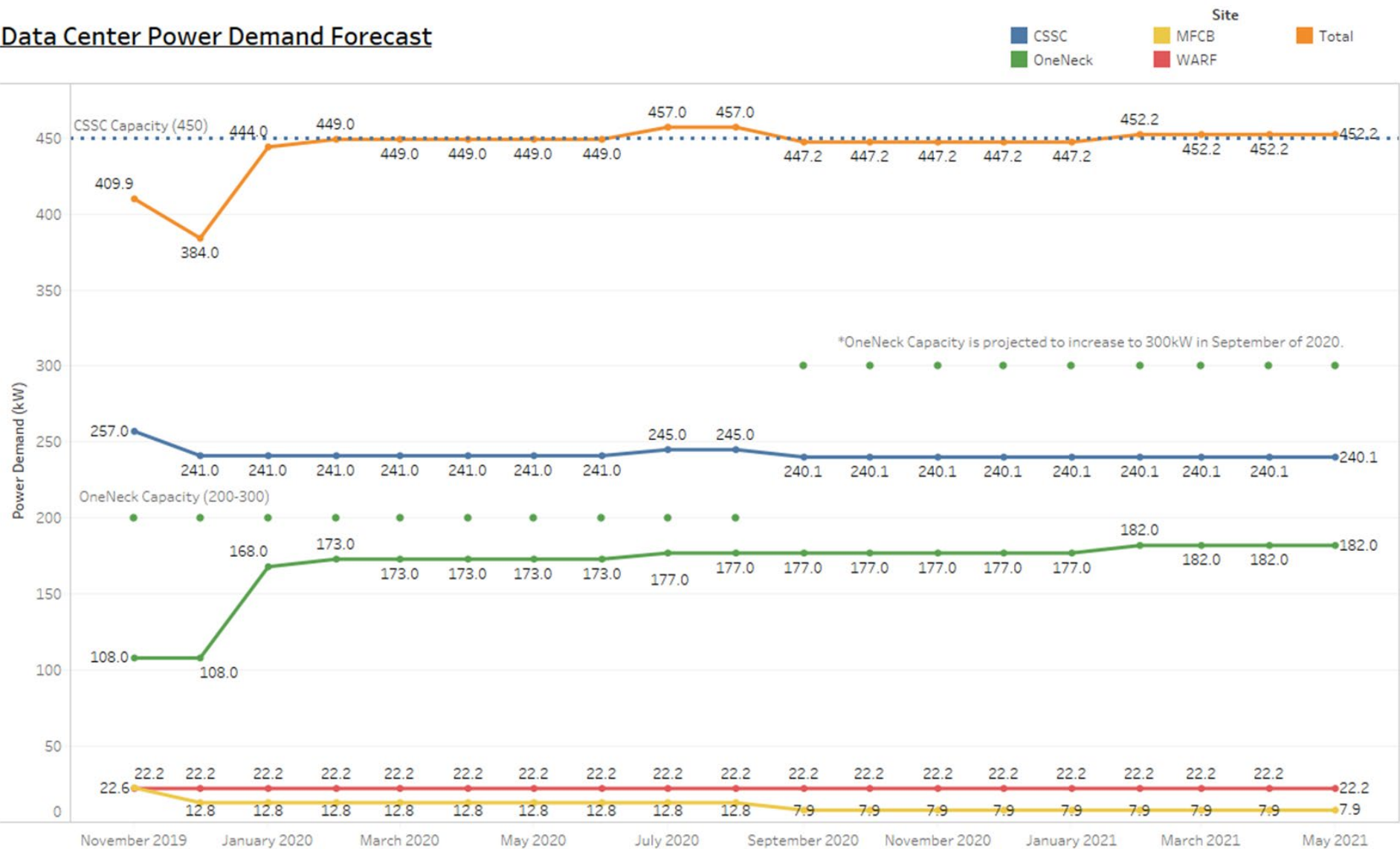


\*If blank, zero problems were reported.

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.

This visualization was created by the Department of User Services.





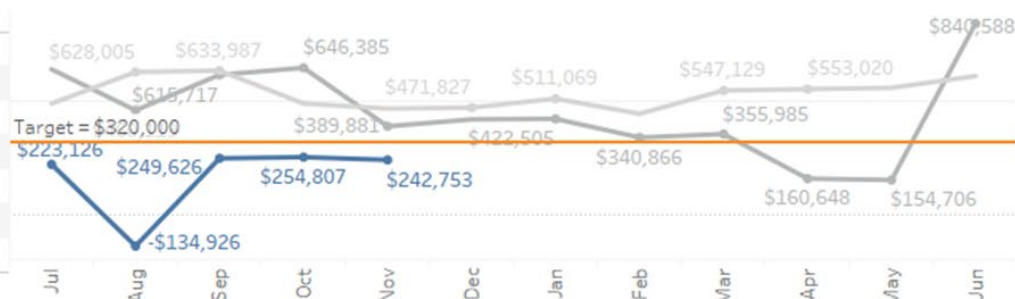
# DOIT OPERATIONS- DIGITAL PUBLISHING & PRINTING SERVICES

## DPPS Rework Information

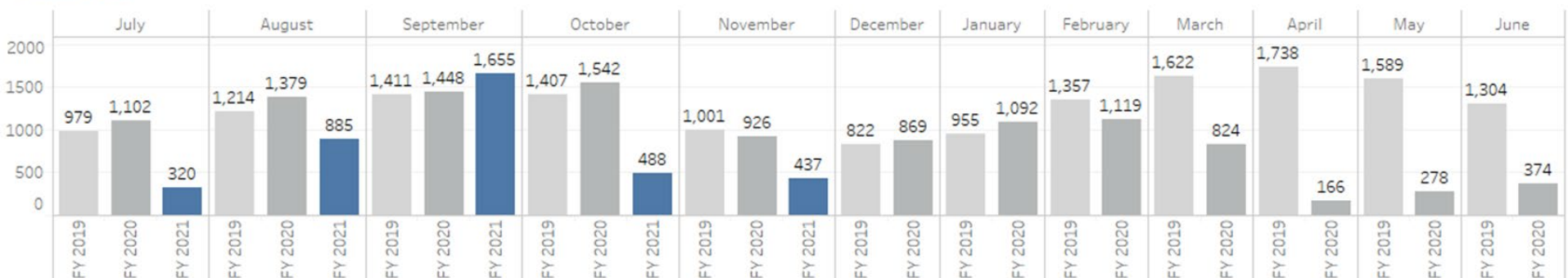
	Total Rework	Cost of Rework	Average Rework
May	0	\$0.00	0.00%
June	1	\$2.33	0.00%
July	5	\$2,035.30	0.00%
August	3	\$1,904.56	0.00%
September	2	\$1,505.20	0.00%
October	1	\$148.68	0.00%
November	2	\$60.00	0.00%

■ At or Below 0.10%

## \* Total Revenue



## Total Jobs



## Average On-Time Percentage by Stream

	April	May	June	July	August	September	October	November
Contract	★ 95.24%	100.00%	★ 95.65%	100.00%	100.00%	100.00%	100.00%	100.00%
Digital Black	100.00%	100.00%	★ 97.56%	100.00%	★ 92.09%	★ 96.92%	★ 94.00%	100.00%
Digital Color	★ 96.43%	★ 93.55%	★ 95.76%	100.00%	★ 94.87%	★ 93.67%	★ 93.96%	★ 99.40%
Extension DPC	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Large Format	100.00%	★ 0.00%	★ 85.71%	100.00%	★ 97.69%	★ 95.80%	100.00%	100.00%
Offset Print	100.00%	★ 92.68%	★ 97.14%	100.00%	★ 94.55%	★ 93.84%	★ 96.96%	★ 94.25%
School of Human Ecology DPC	100.00%	★ 98.53%	100.00%	100.00%	100.00%	★ 99.01%	100.00%	100.00%
WEBCRD **	100.00%	★ 0.00%	★ 0.00%	100.00%	100.00%	100.00%	100.00%	100.00%
WSB DPC	100.00%	★ 90.63%	★ 0.00%	100.00%	★ 97.84%	★ 96.77%	100.00%	100.00%

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

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

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





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

### Notes:

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

### Kaltura

Media Asset: An individual media item uploaded to Kaltura - most often this is a video or audio file, but it could also be an image

Time Played: Total amount of time all Kaltura media assets were played during the month

Avg. Play Time: Time played divided by number of plays

Unique Viewers: Students, most often

Duration of uploaded media: length (minutes) of new video assets this month

Contributors: Persons uploading assets to Kaltura - most often instructors.

-Total media assets for current month does not equal total media assets from previous month plus new media assets in current month because some user have deleted assets in the meantime

-Reported numbers of unique viewers is low by an unknown amount of users because Kaltura Mediaspace does not collect unique user data for media embedded via iframes or assets that allow public viewers

### Turnitin

Active Classes: The number of classes that had any activity (submissions, marks, assignment creation, new students, etc.) within the month

Active Instructors: Like active classes-the number of unique instructors associated with active classes

Student Accounts: The total number of student accounts as of end date (cumulative)

Instructor Accounts: The total number of instructor accounts as of end date (cumulative)

Submissions: Typically text documents in .doc, .pdf, other wordprocessing formats, or plain text

### ACAR (Advanced Content Authoring and Reporting)

Pressbooks: Number of Pressbooks in the UW-Madison instance; each pressbook is a subsite on the UW-Madison instance

Storyline 360: Total number of storyline modules in all UW-Madison subsites on Grassblade.doit.wisc.edu

User: Anyone with an account in Pressbooks (whether as subscriber, editor, administrator, or super-admin)

### Canvas

Active Course: A canvas shell is created for every course offered at UW-Madison.

"Active" Canvas courses are those manually activated by an instructor

Student: Any user enrolled in the canvas course with the "student" role (not instructors or admins)

Instructor: Number of Canvas course enrollments with the "instructor" role

(predominately actual course instructors, occasionally will include a course coordinator or support staff)



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

### Kaltura Mediaspace

	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
Incidents Resolved by Help Desk	24	100	146	62	36
Incidents Resolved by Learn@UW Madison	24	45	41	18	22
Average Play Time (mins)	10	7	12	13	14
Contributors				3,244	3,744
Duration of uploaded media				304,308	249,786
New Media Assets	6,264	8,993	19,437	16,481	14,395
Number of Plays	379,200	238,773	1,535,005	1,404,686	1,127,236
Storage Utilized (TB)	82	85	92	98	102
Time Played (mins)	3,919,185	1,656,188	18,167,594	18,658,422	15,889,960
Total Media Assets	154,243	163,051	180,086	196,291	210,776
Unique viewers				29,537	27,740

### Turnitin

Incidents Resolved by Help Desk	4	1	4	2	1
Incidents Resolved by Learn@UW Madison	0	0	0	2	1
Active Classes	140	368	533	599	581
Active Instructors	187	417	615	812	863
Instructor Accounts	2,046	2,237	2,423	2,580	2,670
Student Accounts	18,702	18,794	26,134	28,836	30,053
Submissions	8,368	2,985	29,475	50,541	43,242

### ACAR

Incidents Resolved by Help Desk	1	2	1	0	2
Incidents Resolved by Learn@UW Madison	17	18	13	7	3
New Pressbooks this Month	16	20	5	9	9
New Storyline 360 Modules this Month	1	0	4	0	0
Total Pressbooks	490	510	515	524	533
Total Storyline 360 Modules	180	180	184	184	184
Unique Users	5,463	7,211	7,954	8,242	8,271

### Canvas

Incidents Resolved by Help Desk	209	442	647	270	171
Incidents Resolved by Learn@UW Madison	200	256	221	126	97
Active For-Credit Courses	904	910	3,878	3,945	3,964
Active Training Courses	472	552	573	590	591
Unique Instructors	1,554	1,591	5,431	5,566	5,668
Unique Students	14,169	14,112	42,399	42,520	42,421

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

						Notes:
						<u>Atomic Assessments</u>
						Active Course: Course with Atomic Assessments assignments that have been accessed in date range
						Instructors: Users with "instructors" role, which may include some number of course administrators, teaching assistants, or other numbers for Atomic Assessments are for Dec 1-23. No use of Atomic Assessments is anticipated Dec 24-31. Any unforeseen usage will be updated in the January report.
Atomic Assessments		Aug-20	Summer 2020	Sep-20	Oct-20	Nov-20
	Unique Students			3,487	3,533	
	Instructors			400	390	
	Incidents Resolved by Learn@UW Madison	9		10	9	1
	Active Courses			63	59	
* Top Hat	Incidents Resolved by Help Desk	0		3	4	0
	Unique Students		1,365			
	Incidents Resolved by Learn@UW Madison		1	0	0	0
	Active Courses		31			
	Incidents Resolved by Help Desk		0	3	0	0
AEFIS	Unique Instructors		52			
	Incidents Resolved by Learn@UW Madison	40		54	128	140
	Incidents Resolved by Help Desk	6		2	9	20
	Total exams	1,568		28,818	15,652	32,471
	Unique students	1,001		12,666	4,639	16,192
Honorlock	Total courses	25		196	39	219
	Support tickets closed by Help Desk	94		36	16	6
	Support tickets closed by Learn@UW-Ma..	14		9	20	10
	Exams per student	2		2	3	2

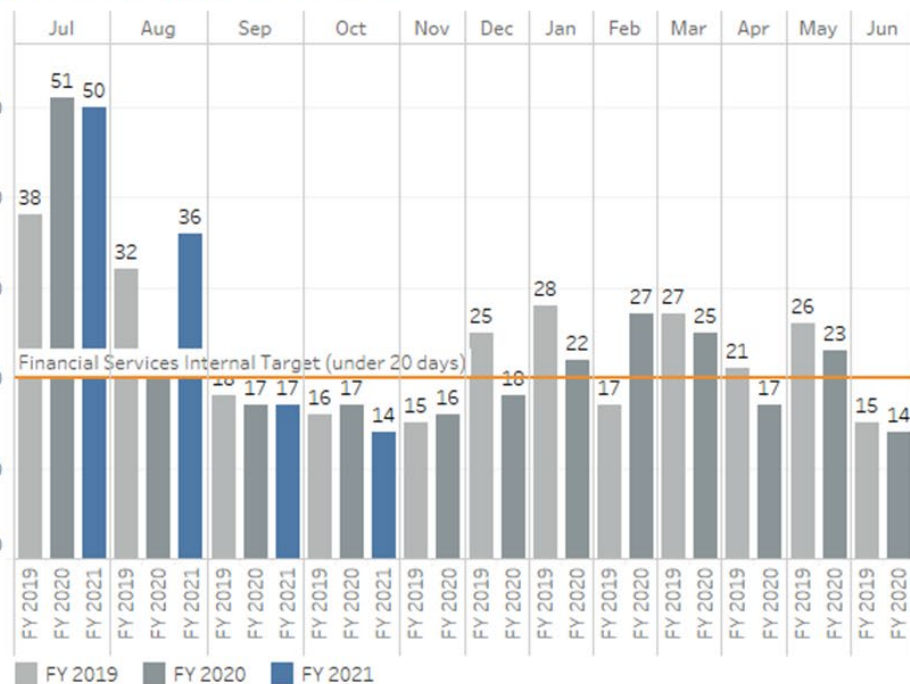
\*As of winter semester 2020, TopHat has transitioned from monthly reporting to semester reporting.

## 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	
December	37	17	
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	
December	62	35	
January	30	26	
February	23	29	
March	29	31	
April	27	24	
May	33	28	
June	20	19	

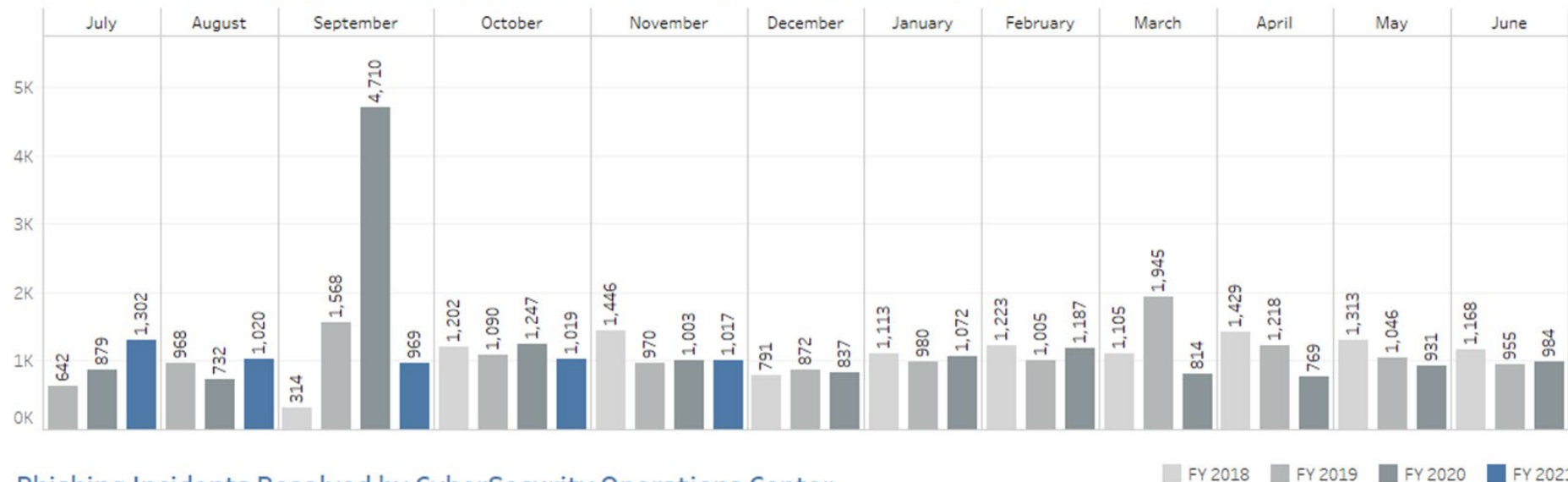
This visualization was created by DoIT in the Department of User Services.





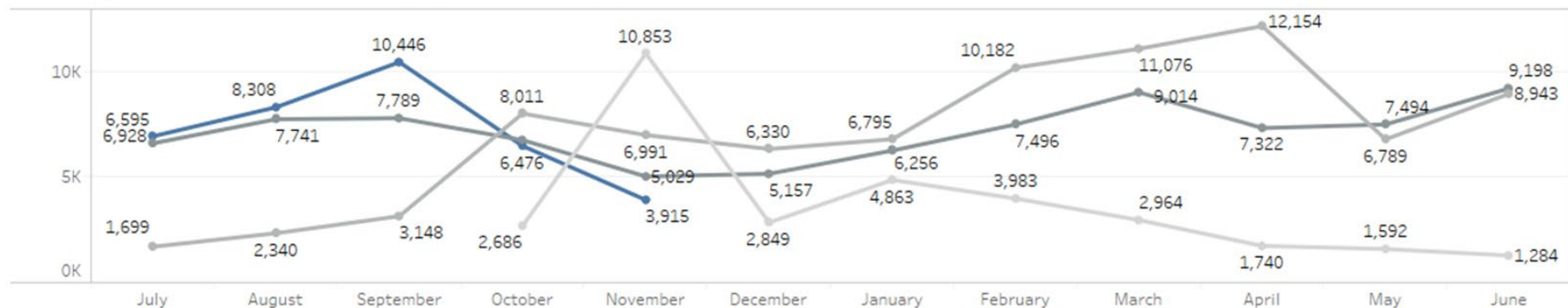
## DoIT OPERATIONS: CYBERSECURITY-CYBERSECURITY OPERATIONS CENTER

### Incidents Resolved by CyberSecurity Operations Center (Phishing excluded)



FY 2018 FY 2019 FY 2020 FY 2021

### 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.

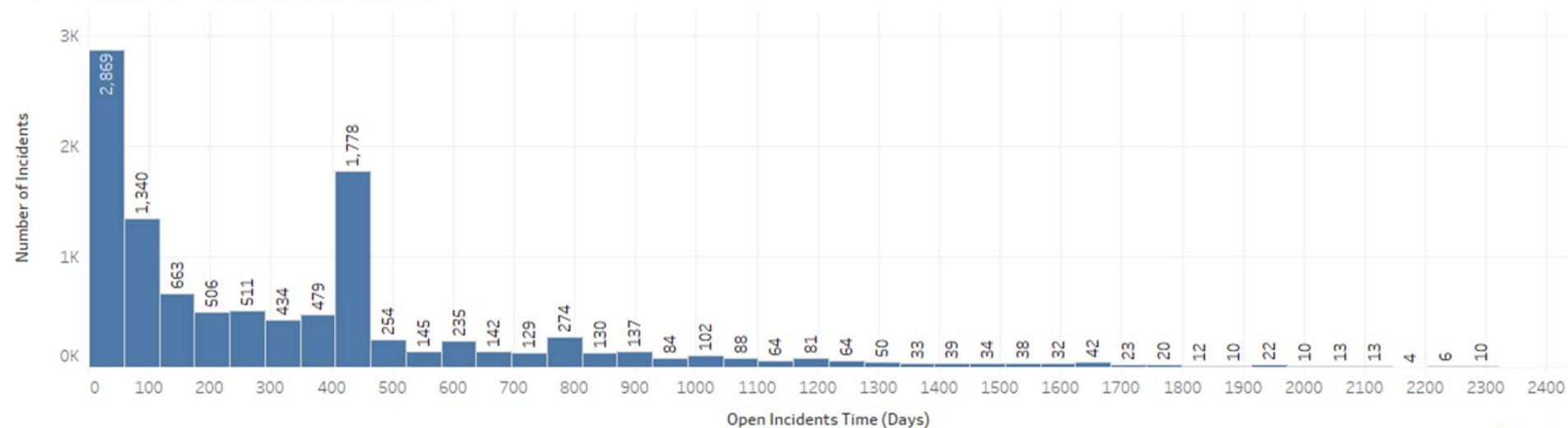
## DoIT INCIDENT AGING REPORT

NOTE: Open incidents analyzed through 12/01/2020

### 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	57	247	730	630
Cybersecurity	114	213	2,274	2,155
NS	14	141	600	525
SEO	28	79	333	290
US	170	799	3,591	3,392
Other	48	172	1,485	1,416
Total	431	1,651	9,013	8,408

### Total Open Incidents by Age (days)





## Metrics Report Monthly Updates

There are no new updates this month.

## 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.



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



## 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.