



DoIT Operations Monthly Report

February 2021

Published March 12, 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 mean 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	March %	April %	May %	June %	July %	August %	September %	October %	November %	December %	January %	February %
API Manager	99.00%	100.00	★89.24	★90.06	★96.18	100.00	100.00	100.00	100.00	★97.38	100.00	100.00	100.00
Enterprise Content Management (ECM)	99.00%	99.96	100.00	100.00	★97.78	100.00	100.00	★98.76	★73.26	100.00	99.86	100.00	100.00
Enterprise Service Bus (ESB)	99.00%	100.00	100.00	★93.30	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Knowledgebase (KB)	99.00%	99.95	99.91	100.00	99.90	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
My UW	99.00%	99.78	100.00	100.00	100.00	100.00	100.00	99.58	100.00	100.00	100.00	100.00	100.00
NetID Login	99.90%	99.97	100.00	99.98	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	100.00
Shared Web Hosting	99.00%	★83.37	99.93	★97.21	99.33	100.00	100.00	100.00	100.00	100.00	99.96	★98.07	99.94
Wisc Web	99.00%	★75.41	99.82	100.00	★94.99	99.99	99.91	100.00	★98.69	99.93	100.00	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.



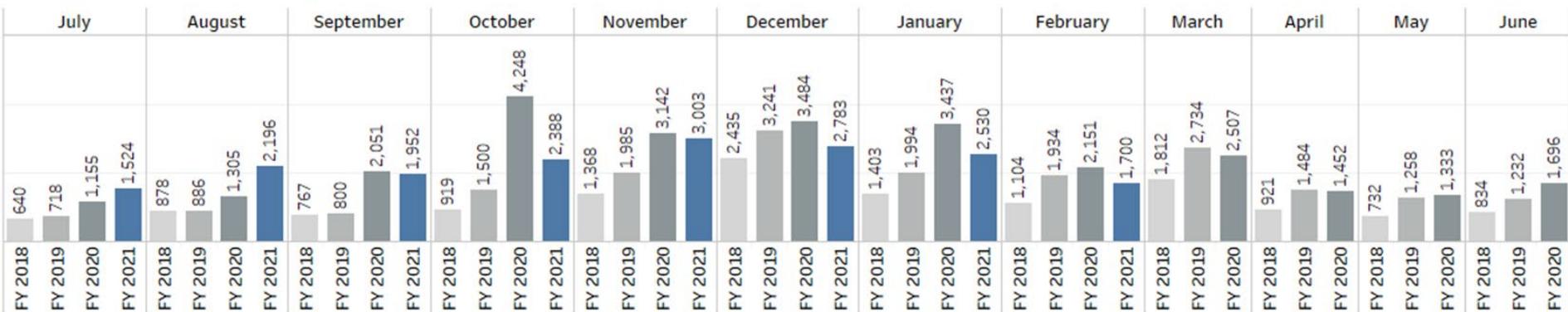
This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: APPLICATION INFRASTRUCTURE SERVICES - IAM SERVICES OVERVIEW

Help Desk Resolution Rates for IAM Services During February

	All Incidents	% of Incidents	Incidents Created by HD	Resolved by HD	* HD % Resolution	*** First Contact Resolution Rate	** Customer Satisfaction	
Multi-Factor Authentication (MFA)	654	28.3%	630	584	92.7%	91.1%	95.4%	IAM Target: HD % Resolution ■ At or above 85.0%
NetID Account Management	1,039	44.9%	1,004	874	87.1%	84.0%	98.2%	2021 Gartner Benchmark: First Contact Resolution ■ Above 71.0%
All IAM Incidents	2,314	100.0%	1,703	1,530	89.8%	86.9%	96.5%	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?"

*** 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%.



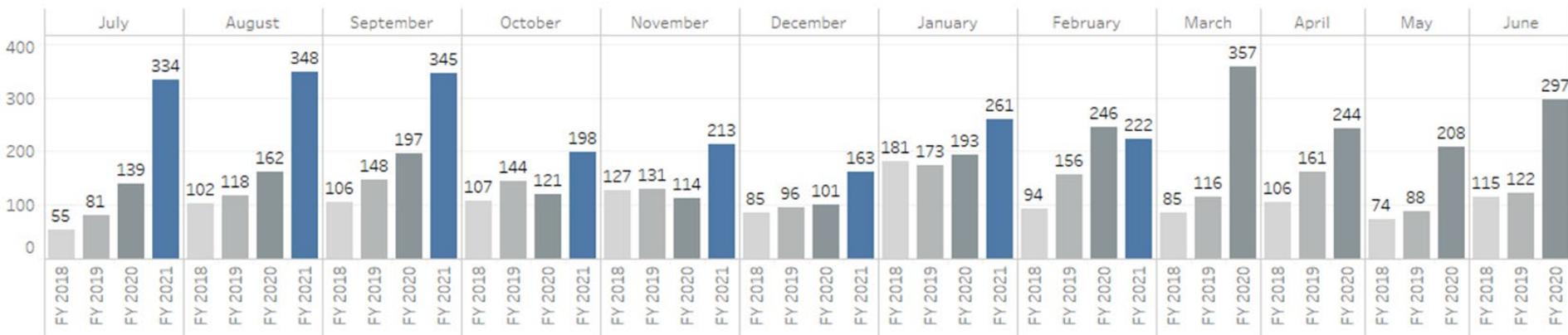
This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: APPLICATION INFRASTRUCTURE SERVICES-WEB PLATFORM SERVICES OVERVIEW

Help Desk Resolution Rates for WPS Services During February

	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)	247	14.7%	17	7	41.2%	100.0%		MyUW Madison/ System - 85% Shared Tools - 15%
MyUW Madison/System	168	10.0%	164	134	★81.7%	77.6%	86.9%	UW Madison Knowledgebase - 10% Web Hosting - 5% WiscWeb - 45%
Shared Tools	10	0.6%	10	1	★10.0%		100.0%	2021 Gartner Benchmark: First Contact Resolution
Web Hosting	92	5.5%	6	1	16.7%			■ Above 71.0% ■ Below 71.0% ★
WiscWeb	52	3.1%	50	13	★26.0%	★50.0%	90.5%	WPS Services Target: Customer Satisfaction
								■ At or above 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?"

*** 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%

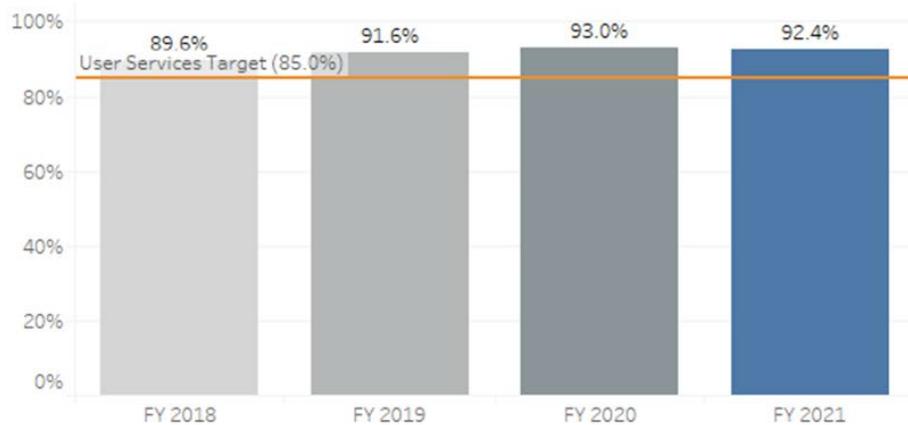
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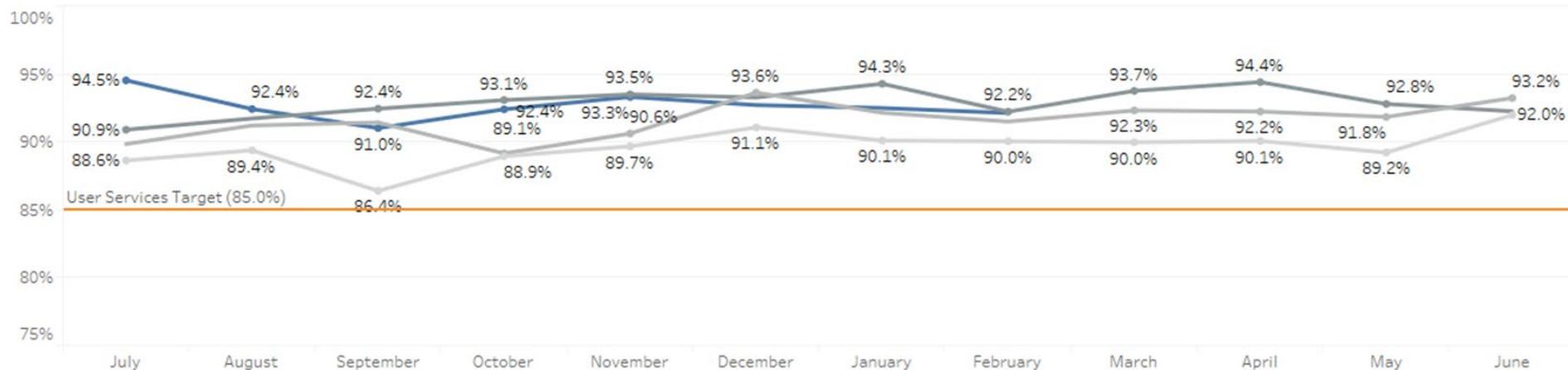
DoIT OPERATIONS: USER SERVICES-HELP DESK OVERVIEW

* Cost per Contact

Customer Satisfaction



Customer Satisfaction

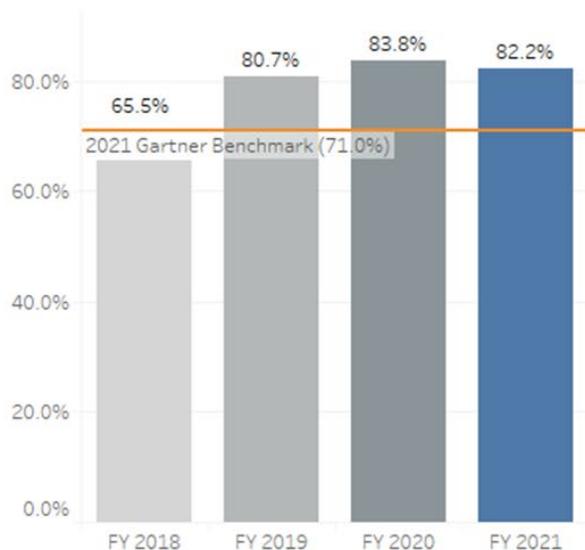


NOTES: Survey respondents rate satisfaction on a 7 point scale in response to: "We value your opinion. How was your experience with us?"
 *Gartner 2019 Benchmark Cost Per Contact is \$16.30. Gartner 2020 Benchmark Cost Per Contact is \$17.90.

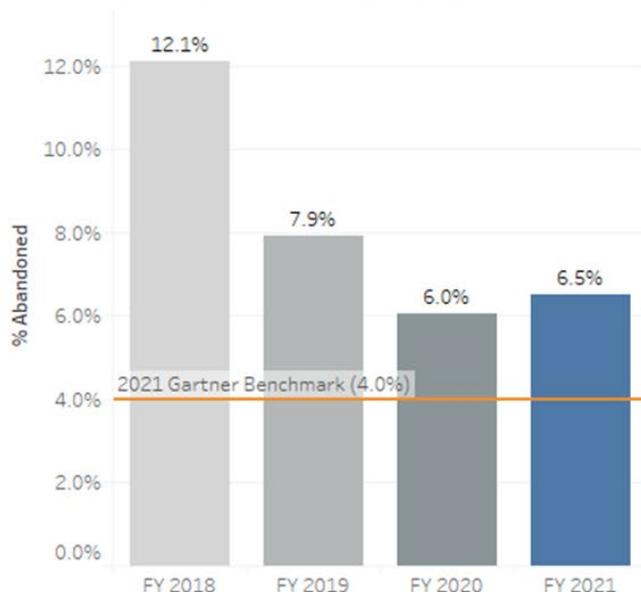


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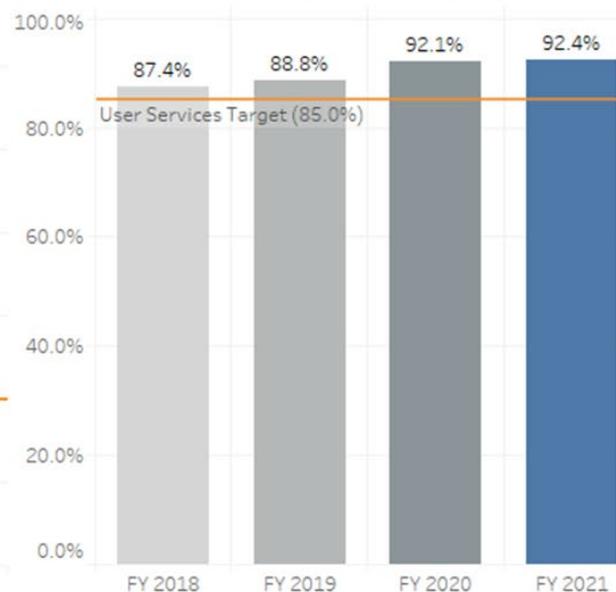
*Help Desk Average First Contact Resolution



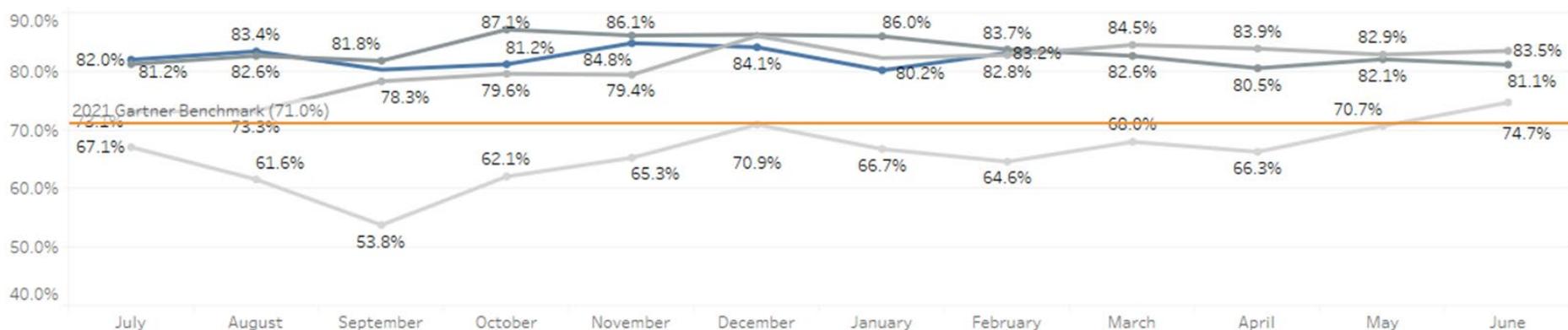
Help Desk Abandonment Rate



**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%.



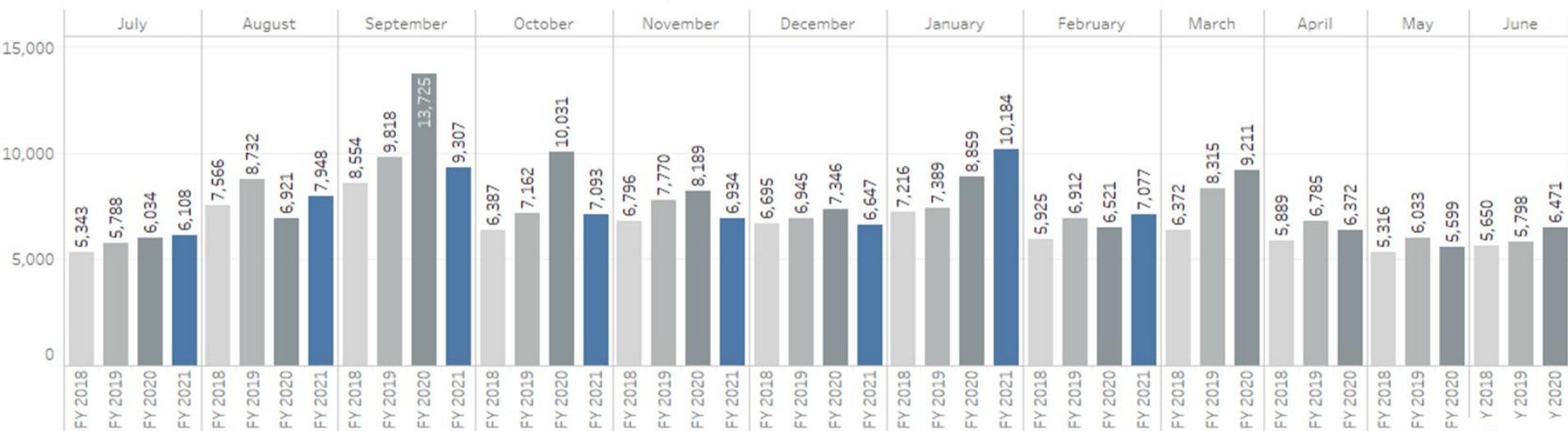
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HELP DESK RESOLUTION RATES FOR TOP 10 SUPPORTED SERVICES IN FEBRUARY

	HD created	% of Total cases created	HD Resolved	** HD % Resolved
NetID Account Management	1,004	6.3%	874	87.1%
Office 365	721	4.6%	528	★73.2%
Multi-factor Authentication (MFA)	630	4.0%	584	92.7%
Referrals	524	3.3%	460	87.8%
Safer Badgers, General	497	3.1%	460	92.6%
UW-Madison Zoom	441	3.3%	360	★81.6%
Learn@UW - Canvas Madison	299	2.3%	224	★74.9%
Hardware Checkout	212	1.3%	127	★59.9%
Network Access, VPN	162	1.0%	95	★58.6%
MyUW Madison	154	0.9%	125	★81.2%

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)

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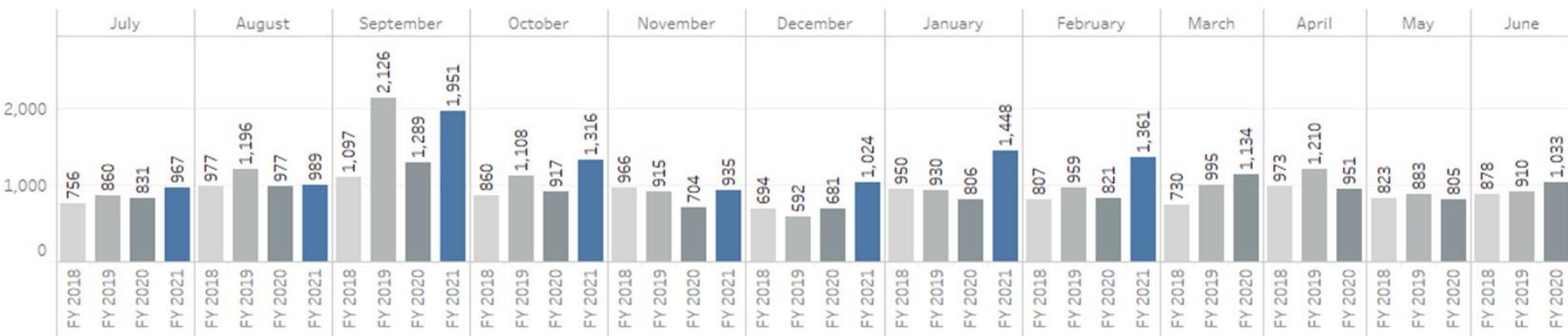


DoIT OPERATIONS: USER SERVICES - PRODUCTIVITY AND COLLABORATIVE SOLUTIONS SERVICES OVERVIEW

Resolution Rates for PCS Services During February

	All Incidents	% of Incidents	Incidents Created by HD	Resolved by HD	* HD % Resolution	*** First Contact Resolution Rate	** Customer Satisfaction	
Office 365	763	49.3%	721	528	★73.2%	81.2%	93.7%	User Services Target: HD% Resolution ■ Below 85.0% ★
UW-Madison Zoom	541	34.9%	441	360	★81.6%	77.7%	93.3%	
UW-Madison Google Apps	111	7.2%	108	70	★64.8%	75.8%	★80.0%	2021 Gartner Benchmark: First Contact Resolution ■ Above 71.0%
UW-Madison Box	89	5.7%	62	40	★64.5%	80.0%	95.9%	
Qualtrics	29	1.9%	18	13	★72.2%	80.0%	97.1%	User Services Target: Customer Satisfaction ■ At or above 85.0% ■ Below 85.0% ★
Wisclist	9	0.6%	5	2	★40.0%	100.0%	★57.1%	
Cloud Fax	7	0.5%	6	4	★66.7%			

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?"

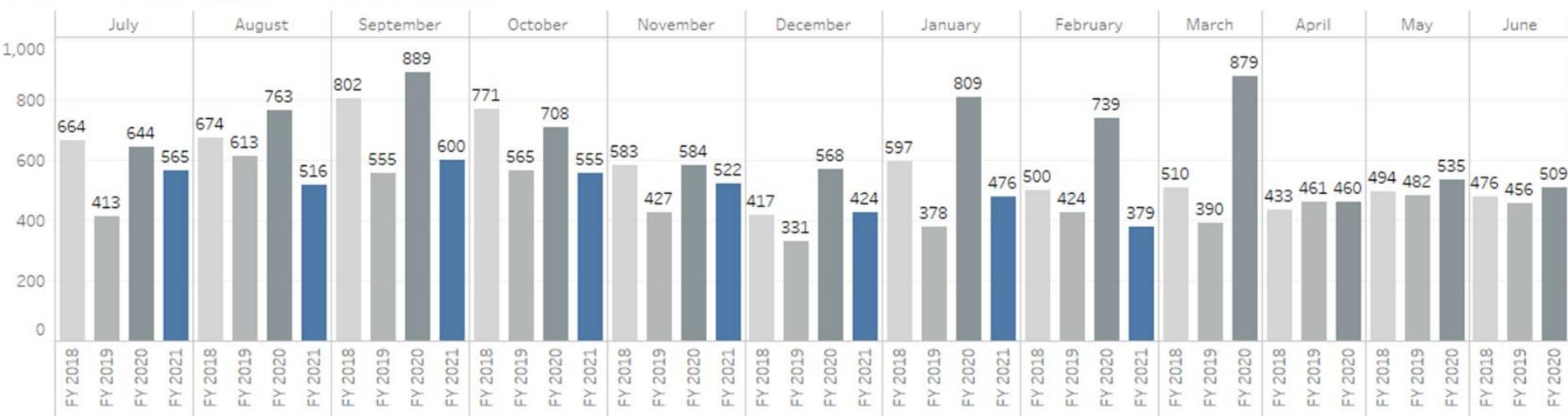
*** First Contact Resolution has been defined as a phone incident opened by the Help Desk and resolved by the Help Desk, within one hour of the incident being created. As only phone incidents are looked at this metric may be blank if no phone incidents were reported for that service during the previous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



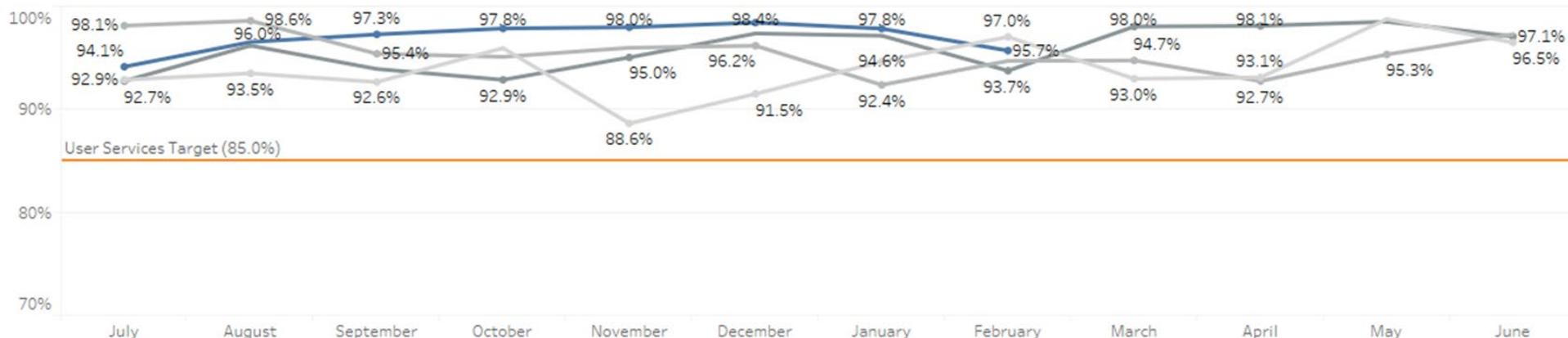
This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: 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

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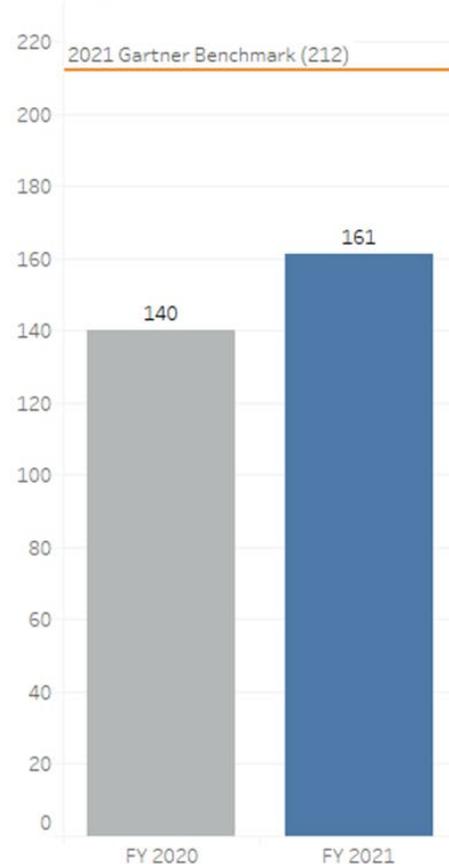


DoIT OPERATIONS: USER SERVICES - DEPARTMENTAL SUPPORT METRICS

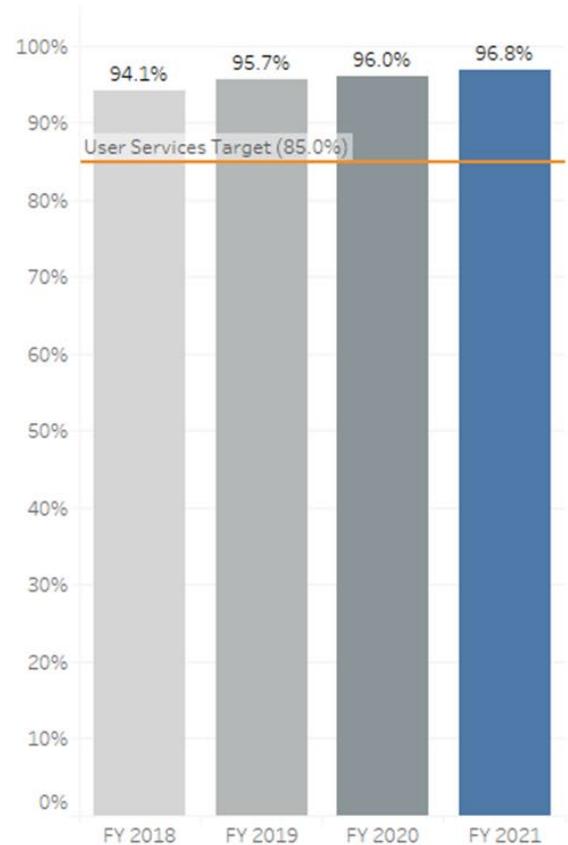
* Cost Per Endpoint



** Endpoints Per Technician



*** Customer Satisfaction



The price per endpoint calculation uses representative contracts to demonstrate the 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).

*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, and our complexity levels for FY20 were \$587.41 for low complexity, \$730 for medium complexity and \$848 for high complexity. Past years did not include division tax, which has been added for the FY21 calculation.

**2020/2021 Gartner Benchmarks include printers. Our data does not include printers. 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?"



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



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	March %	April %	May %	June %	July %	August %	September %	October %	November %	December %	January %	February %
HRS	99.000%	100.000	99.313	100.000	★98.935	100.000	100.000	★91.271	★96.013	100.000	100.000	★97.050	100.000
SFS	99.000%	99.941	99.989	99.464	100.000	100.000	100.000	100.000	100.000	99.799	100.000	100.000	100.000
SIS	99.000%	100.000	99.998	100.000	100.000	100.000	99.953	100.000	100.000	100.000	100.000	99.933	100.000
Informatica	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	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%	100.000	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

Service	Target	December %	January %	February %	Service	Target	December %	January %	February %	Service	Target	December %	January %	February %
Upham Woods	99.900%	100.000	99.997	★98.512	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	★99.802	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-Dec	21-Jan	21-Feb	
UW-Madison campus	Avg (Gb/sec)	5.0	5.4	8.2
	Max (Gb/sec)	16.3	16.6	22.9
	Min (Gb/sec)	1.1	1.4	1.9
	% of full capacity (100Gbps)	5.0	5.4	8.2
UW-Madison research	Avg (Gb/sec)	16.6	19.7	27.2
	Max (Gb/sec)	65.4	67.5	100.0
	Min (Gb/sec)	6.8	8.4	5.7
	% of full capacity (100Gbps)	16.6	19.7	27.2
Internet Exchange (MadIX)	Avg (Gb/sec)	6.0	7.5	7.5
	Max (Gb/sec)	11.8	14.2	14.2
	Min (Gb/sec)	0.0	0.0	0.0
	% of full capacity (20Gbps)	30.0	37.5	37.5

OUT

	20-Dec	21-Jan	21-Feb	
UW-Madison campus	Avg (Gb/sec)	2.40	3.30	4.30
	Max (Gb/sec)	10.00	15.30	46.50
	Min (Gb/sec)	0.97	0.92	1.40
	% of full capacity (100Gbps)	2.40	3.30	4.30
UW-Madison research	Avg (Gb/sec)	13.50	15.70	31.20
	Max (Gb/sec)	38.50	47.00	61.20
	Min (Gb/sec)	4.40	3.90	9.20
	% of full capacity (100Gbps)	13.50	15.70	31.20
Internet Exchange (MadIX)	Avg (Gb/sec)	3.60	4.70	4.70
	Max (Gb/sec)	6.40	8.80	8.80
	Min (Gb/sec)	0.00	0.00	0.00
	% of full capacity (20Gbps)	18.00	23.50	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 <small>Total Controllers: 8 Total APs: 3953</small>		Target	March	April	May	June	July	August	September	October	November	December	January	February
Access Points Avg. Uptime per Day	99.50%	99.73%	★99.48%	★99.16%	★99.14%	★99.20%	★98.97%	★98.56%	★98.51%	★98.47%	★98.55%	★98.59%	★98.65%	
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%	★99.94%	100.00%	100.00%	
Avg. Number of APs Down per Day		26.52	41.23	53.65	56.27	56.61	76.42	89.10	88.65	77.53	80.84	71.48	67.25	
Airwave 2 <small>Total Controllers: 8 Total APs: 4676</small>		Target	March	April	May	June	July	August	September	October	November	December	January	February
Access Points Avg, Uptime per Day	99.50%	99.92%	99.92%	99.83%	★99.45%	★99.37%	99.71%	99.84%	99.80%	99.77%	99.66%	99.67%	99.83%	
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		19.42	21.57	46.71	33.27	34.48	27.42	14.10	15.87	29.60	28.61	53.29	8.43	
Airwave 3 <small>Total Controllers: 4 Total APs: 3721</small>		Target	March	April	May	June	July	August	September	October	November	December	January	February
Access Points Avg Uptime Per Day	99.50%	99.95%	99.93%	99.84%	99.79%	99.81%	99.77%	99.64%	99.70%	99.80%	99.84%	99.87%	99.86%	
Avg. AW3-Controller Uptime per Day	100.00%	100.00%	100.00%	★99.61%	★99.98%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	★99.99%	100.00%	
Avg Number of APs Down per Day		1.52	14.50	5.65	9.77	9.29	25.81	15.77	18.94	11.50	12.13	18.65	12.39	

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%



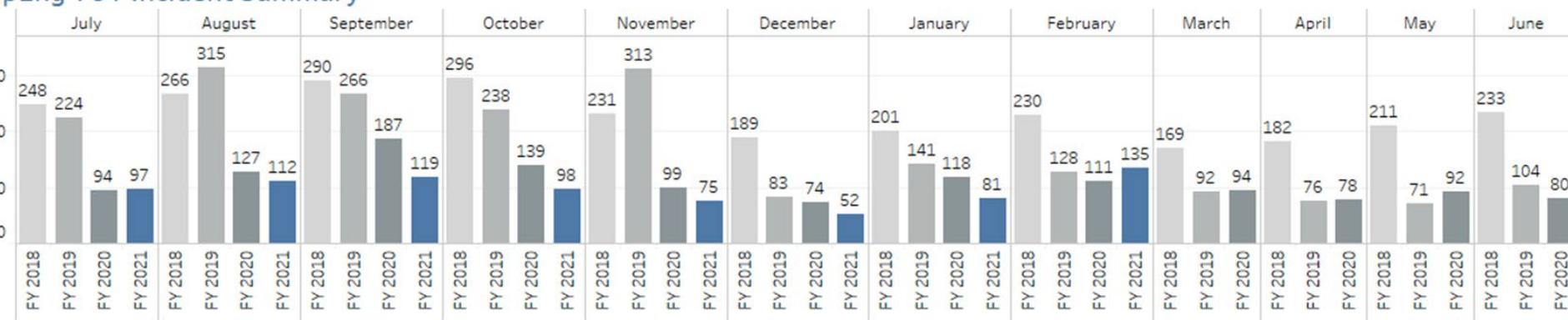
This visualization was created by DoIT in the Department of User Services.

DoIT OPERATIONS: OPERATIONS ENGINEERING INCIDENT SUMMARY

Four Months Incident Summary by Subcategory

		November	December	January	February
Campus Network	AANTS	5	2	4	2
	Bandwidth Threshold Alarm	3	5	2	10
	Firewall/Content ID				2
	Firewall/Install		1	1	
	Firewall/Problem	1	1	2	
	Firewall/Rules	5	1		1
	Port Error Threshold Alarm	2	2		
	Request/Data Jack/Activation	2	2	2	1
	Request/Data Jack/Installation				1
	Request/DHCP		3		2
	Request/DNS/Hostmaster		1	2	1
	Request/DNS/Network Services	10	4	20	15
	Request/Equipment Installation	1			1
	Request/Hardware	3		5	10
	Request/IP Allocation	14	10	10	25
	Video	1			
	Wired Network Issue	3	8	2	6
	Wireless	9	4	10	6
	Wireless Device Registration				1
	Campus Network Housing	Device Registration HAP	4		9
HAP Reset		1	1		
Latency or Packet Drop		3			
VPN	Submit Incident				2
	Client Issue	2	2	2	7
	Submit Incident	3	2	8	31
eduroam	Submit Incident	1			1
	Troubleshooting	1	1		
Others		1	2	2	2
Grand Total		75	52	81	135

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	March %	April %	May %	June %	July %	August %	September %	October %	November %	December %	January %	February %
Bucky Backup	99.000%	99.870	99.386	100.000	100.000	100.000	99.615	★95.769	★98.329	99.188	100.000	100.000	100.000
Campus Card Access	99.500%	100.000	100.000	100.000	100.000	100.000	99.617	100.000	100.000	100.000	100.000	100.000	100.000
Campus Computing Infrastructure	99.500%	100.000	100.000	99.989	100.000	100.000	100.000	100.000	100.000	★99.477	100.000	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	98.000%	100.000	99.921	99.921	100.000	99.664	100.000	100.000	100.000	99.799	100.000	100.000	100.000
Select Agent	99.900%	100.000	100.000	★97.258	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
Storage	99.900%	★95.616	100.000	100.000	100.000	★98.132	100.000	100.000	100.000	100.000	100.000	100.000	★99.293
Video Monitoring System	99.900%	100.000	100.000	100.000	100.000	99.973	100.000	100.000	100.000	100.000	100.000	99.960	100.000
WisclT (Cherwell)	99.500%	100.000	100.000	100.000	99.944	99.630	100.000	100.000	★86.962	100.000	★99.375	100.000	99.851

Target Colors
★ Below Target ■ Above Target

NOTES:

*To more closely align Service Availability reporting with WisclT 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	99.980	336	59	149.3	293.0
Linux	99.950	99.990	414	93	165.6	234.0

Top Customers By Percentage of Labor Hours

	Rank	% of Total
DoIT - Public Cloud Service	1	17.30%
DoIT Internal Customers	2	11.40%
DoIT - Microsoft SQL Server Hosting	3	7.60%
UWPD	4	3.60%
HRS	5	2.60%
WHS	6	2.20%
CBS	7	2.00%
SFS	8	1.30%
BRMS	9	0.40%
Globus	9	0.40%
WisclT	9	0.40%
Union	9	0.40%

Top Customers By Server Count

	Rank	# of Servers
Cybersecurity	1	98
SFS, HRS	2	97
Identity and Access Management	3	60
DoIT Web Platform Services	4	44
Student Information System	5	40
Office 365	6	27
Database Aggregation (FASTAR)	7	26
Imaging	8	25
DoIT Service Management	9	23
Wisconsin Historical Society	9	23

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



DoIT OPERATIONS: SOLUTIONS ENGINEERING VULNERABILITIES SUMMARY

Four Months Vulnerability Summary

Type	Severity	November	December	January	February
Potential Vulnerability	1	2	2		2
	2	1			
	3	38	4	12	13
	4	1	8	8	
	5		1		
Vulnerability	1	12	9	6	43
	2	112	87	116	32
	3	2,023	3,089	880	361
	4	2,471	1,975	1,442	1,183
	5	539	1,437	772	437
Vulnerability or Potential Vulnerability	2	2			
	3	6	3	8	3
	4	9	1	48	10
	5	1	1		2
Grand Total		5,217	6,617	3,292	2,086

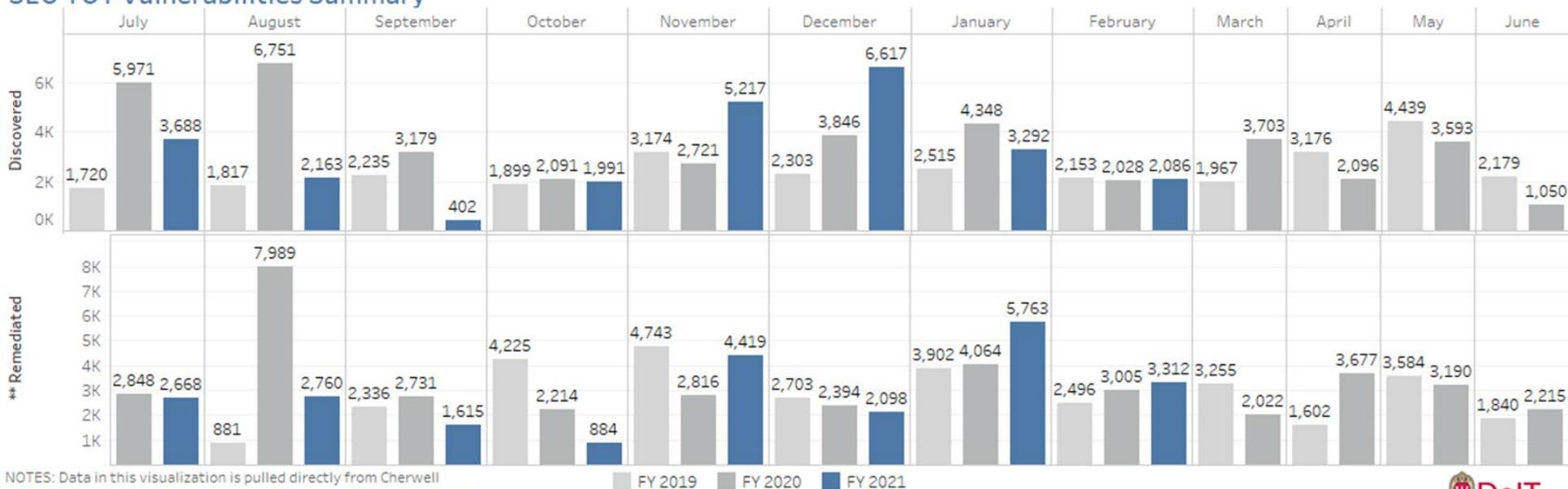
*Active & Urgent Vulnerabilities

92

Remaining From February

6

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.

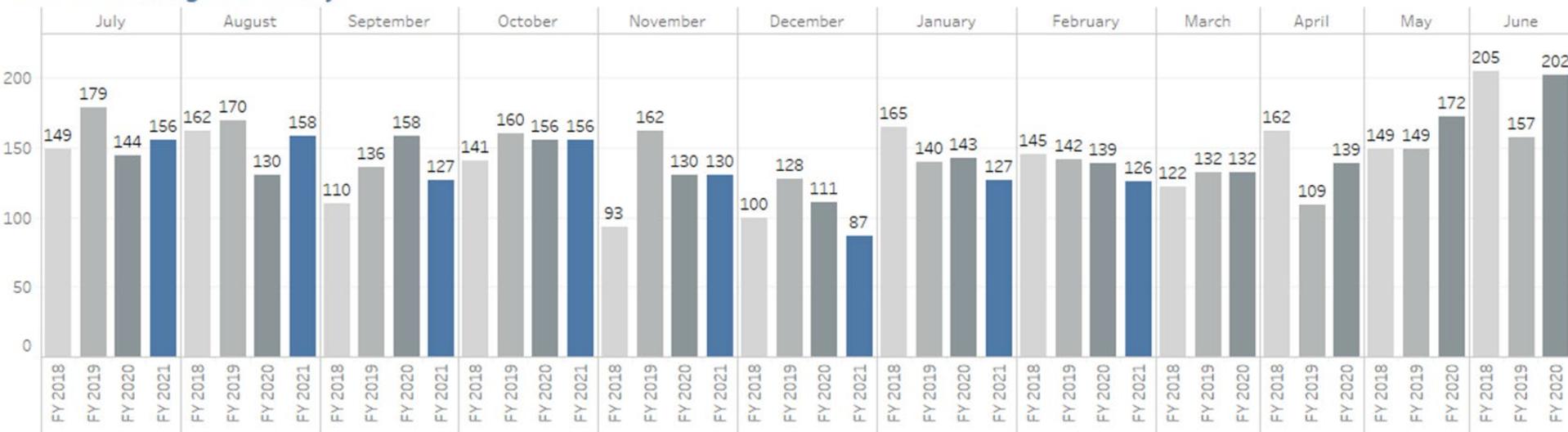


DoIT OPERATIONS: SYSTEMS & NETWORK CONTROL CENTER

* Four Months Network Problem Summary

Technical Service	November	December	January	February
Boreas	13	2	7	6
Campus Network	96	119	72	76
MUFN	5	3	4	2
Northern Tier	3			3
UW SysNET	15	10	7	9
Grand Total	132	134	90	96

SEO YOY Outage Summary

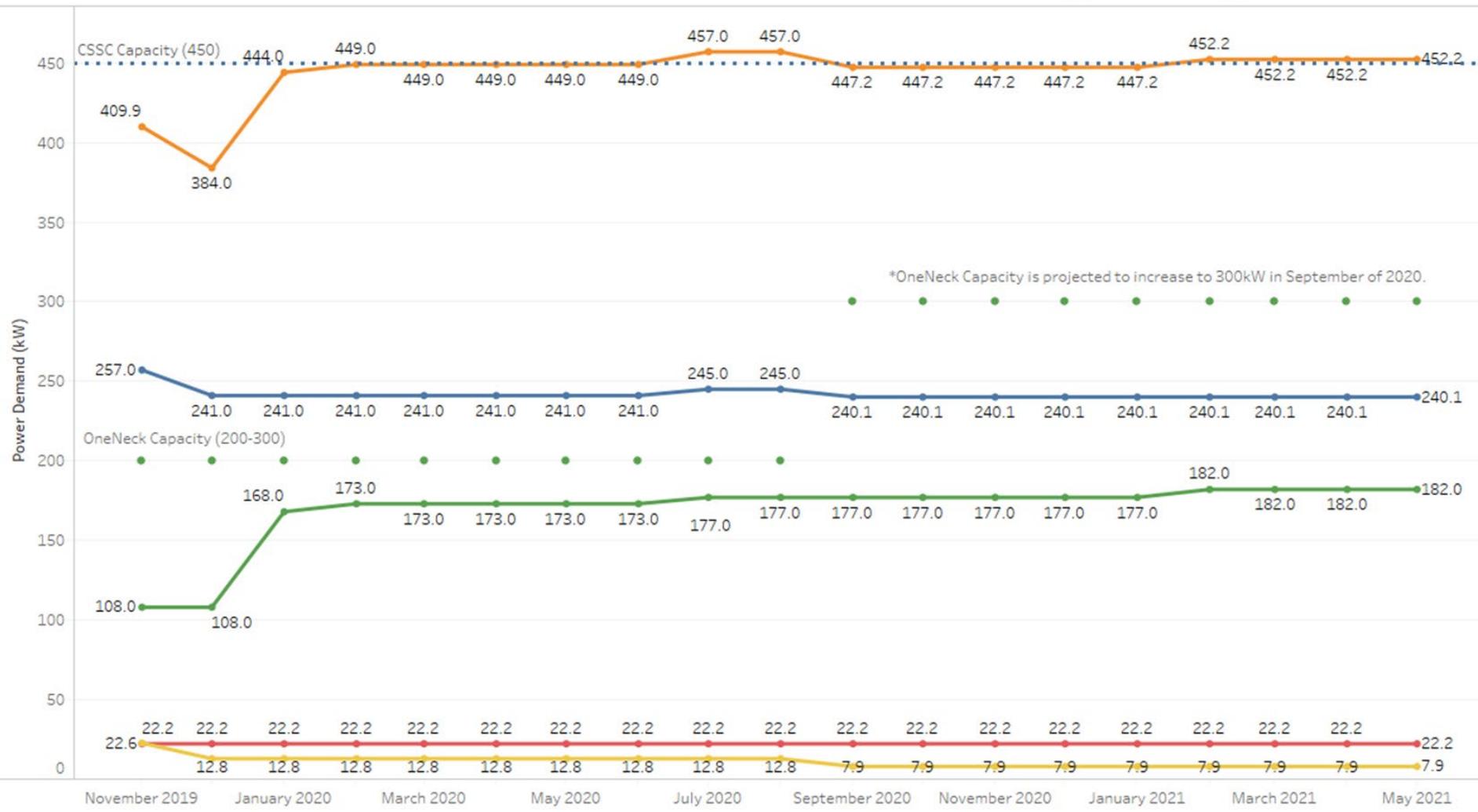


*If blank, zero problems were reported.

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

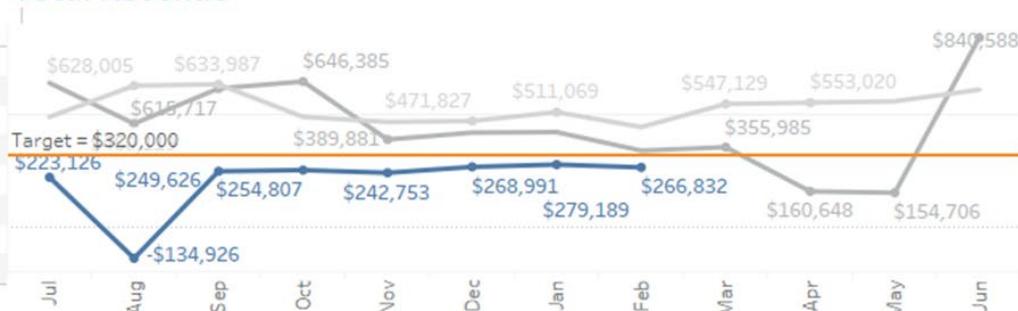
FY 2019
FY 2020
FY 2021

DPPS Rework Information

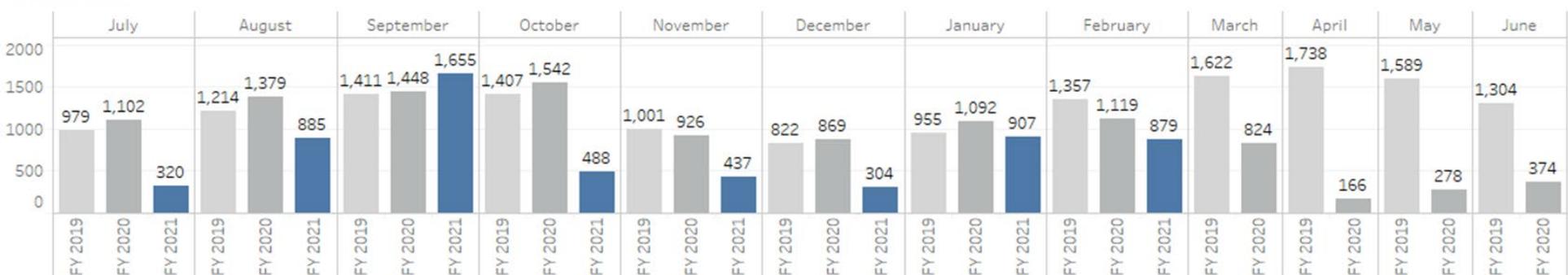
■ At or Below 0.10%

	Total Rework	Cost of Rework	Average Rework
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%
February	0	\$0.00	0.00%

* Total Revenue



Total Jobs



Average On-Time Percentage by Stream

★ Below 99.90% ■ At or Above 99.90%

	July	August	September	October	November	December	January	February
Contract	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Digital Black	100.00%	★92.09%	★96.92%	★94.00%	100.00%	100.00%	100.00%	100.00%
Digital Color	100.00%	★94.87%	★93.67%	★93.96%	★99.40%	★99.40%	99.97%	99.93%
Extension DPC	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	★96.96%
Large Format	100.00%	★97.69%	★95.80%	100.00%	100.00%	100.00%	100.00%	100.00%
Offset Print	100.00%	★94.55%	★93.84%	★96.96%	★94.25%	★95.25%	★99.76%	★99.13%
School of Human Ecology DPC	100.00%	100.00%	★99.01%	100.00%	100.00%	100.00%	100.00%	100.00%
WEBCRD **	100.00%	100.00%	100.00%	100.00%				
WSB DPC	100.00%	★97.84%	★96.77%	100.00%	100.00%	100.00%	★96.12%	★98.80%

* 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

	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Notes:	
Kaltura Mediaspace	Incidents Resolved by Help Desk	62	36	25	45	61	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
	Incidents Resolved by Learn@UW Madison	18	22	21	21	18	Time Played: Total amount of time all Kaltura media assets were played during the month
	Average Play Time (mins)	13	14	15			Avg. Play Time: Time played divided by number of plays
	Contributors	3,244	3,744	7,195			Unique Viewers: Students, most often
	Duration of uploaded media	304,308	249,786	2,617,780			Duration of uploaded media: length (minutes) of new video assets this month
	New Media Assets	16,481	14,395	59,736			Contributors: Persons uploading assets to Kaltura - most often instructors.
	Number of Plays	1,404,686	1,127,236	617,645			-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
	Storage Utilized (TB)	98	102	132			
	Time Played (mins)	18,658,422	15,889,960	9,197,828			-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
	Total Media Assets	196,291	210,776	270,515			
Unique viewers	29,537	27,740	24,687				
Turnitin	Incidents Resolved by Help Desk	2	1	3	1	0	Turnitin Active Classes: The number of classes that had any activity (submissions, marks, assignment creation, new students, etc.) within the month
	Incidents Resolved by Learn@UW Madison	2	1	0	3	3	Active Instructors: Like active classes-the number of unique instructors associated with active classes
	Active Classes	599	581	628	471	458	Student Accounts: The total number of student accounts as of end date (cumulative)
	Active Instructors	812	863	963	449	619	Instructor Accounts: The total number of instructor accounts as of end date (cumulative)
	Instructor Accounts	2,580	2,670	2,751	2,835	2,931	Submissions: Typically text documents in .doc, .pdf, other wordprocessing formats, or plain text
	Student Accounts	28,836	30,053	31,002	31,224	31,985	
	Submissions	50,541	43,242	38,894	2,425	30,726	
ACAR	Incidents Resolved by Help Desk	0	2	0	1	1	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
	Incidents Resolved by Learn@UW Madison	7	3	9	8	2	Storyline 360: Total number of storyline modules in all UW-Madison subsites on Grassblade.doit.wisc.edu
	New Pressbooks this Month	9	9	2	4	3	User: Anyone with an account in Pressbooks (whether as subscriber, editor, administrator, or super-admin)
	New Storyline 360 Modules this Month	0	0	4	1	2	
	Total Pressbooks	524	533	535	539	542	
	Total Storyline 360 Modules	184	184	188	189	191	
Canvas	Unique Users	8,242	8,271	8,302	8,898	9,089	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
	Incidents Resolved by Help Desk	270	171	195	418	269	Student: Any user enrolled in the canvas course with the "student" role (not instructors or admins)
	Incidents Resolved by Learn@UW Madison	126	97	128	166	110	Instructor: Number of Canvas course enrollments with the "instructor" role (predominately actual course instructors, occasionally will include a course coordinator or support staff)
	Active For-Credit Courses	3,945	3,964	3,957	3,710	3,822	
	Active Training Courses	590	591	607	640	648	
	Unique Instructors	5,566	5,668	5,665	5,009	5,194	
	Unique Students	42,520	42,421	42,165	40,351	40,390	
Atomic Assessments	Incidents Resolved by Help Desk	4	0	2	0	3	Atomic Assessments Active Course: Course with Atomic Assessments assignments that have been accessed in date range
	Incidents Resolved by Learn@UW Madison	9	1	4	2	1	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.
	Active Courses	59		47			
	Instructors	390		360			
	Unique Students	3,533		1,884			

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



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

	Oct-20	Nov-20	Dec-20	Fall 2020	Jan-21	Feb-21
*Top Hat	Unique Students			2,516		
	Incidents Resolved by Learn@UW Madison	0	0	0	0	0
	Incidents Resolved by Help Desk	0	0	0	3	1
	Active Courses				35	
	Unique Instructors				100	
AEFIS	Incidents Resolved by Learn@UW Madison	128	140	127	44	30
	Incidents Resolved by Help Desk	9	20	54	5	10
Honorlock	Total exams	15,652	32,471	35,123	143,400	1,509
	Unique students	4,639	16,192	17,480	21,324	1,271
	Total courses	39	219	250	345	62
	Support tickets closed by Help Desk	16	6	5		11
	Support tickets closed by Learn@UW-Madison	20	10	4		1
LEAD	Exams per student	3	2	2	7	1
	Total instructor views	164	79	16		14
	Support tickets closed by Help Desk				0	
	Instructor views of "Grades by Page Views" visualization	44	22	5		3
	Instructor views of "Page Views by Date and Hour" visualization	51	25	5		4
	Instructor views of "Page Views by Activity Type" visualization	33	19	4		2
Engage eText	Instructor views of "Home Page" visualization	36	13	2		5
	Support tickets closed by Learn@UW-Madison				3	
	% of students opted out				1	
	Course sections				178	
	Courses				84	
	Departments				35	
	Schools / Colleges				7	
	Student enrollment				18,780	
Unique instructor combos				130		

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"

Assessment Evaluation Feedback & Intervention System (AEFIS):

CE Response Rate: Percentage of all potential student respondents that submitted an AEFIS course evaluation

DESL Usage: Uses a direct evidence of student learning curriculum map at the program level and/or section level

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).

Engage eText: electronic textbook provided by a publisher that students have access to during their UW student experience

Digital learning tool (DLT): publisher-bundled electronic tools (such as question sets) associated with a print or digital text

Student enrollment: Sum of student enrollment in all courses using an eText and/or Digital Learning Tool (not unique students)

Schools / Colleges: Number of schools and colleges that have a course using an eText and/or DLT

Departments: Number of departments that have a course using an eText and/or DLT

Courses: Number of courses using an eText and/or DLT

Course sections: Number of course sections using an eText and/or DLT (some courses have multiple sections using digital texts and tools)

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

% of students opting out: Percentage of enrolled students that choose not to use a digital text or tool

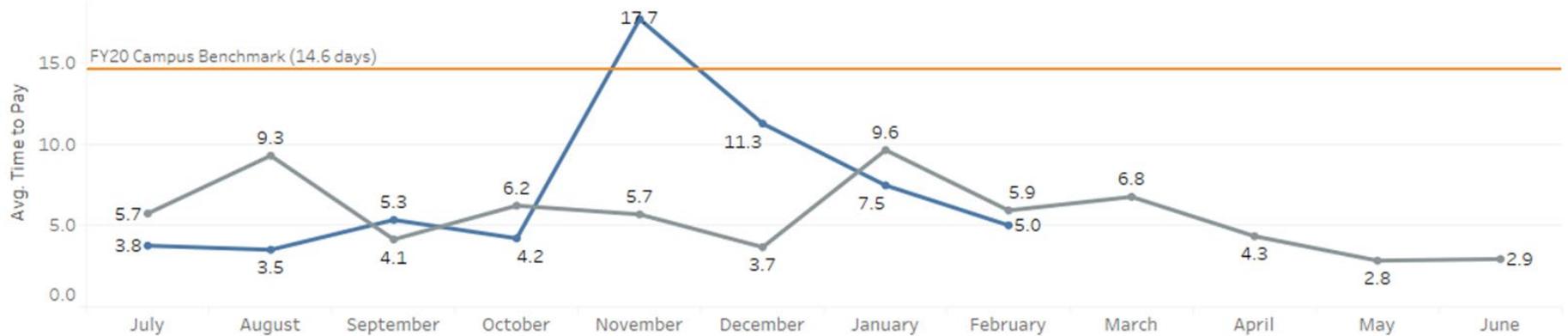
*As of winter semester 2020, TopHat has transitioned from monthly reporting to semester reporting.



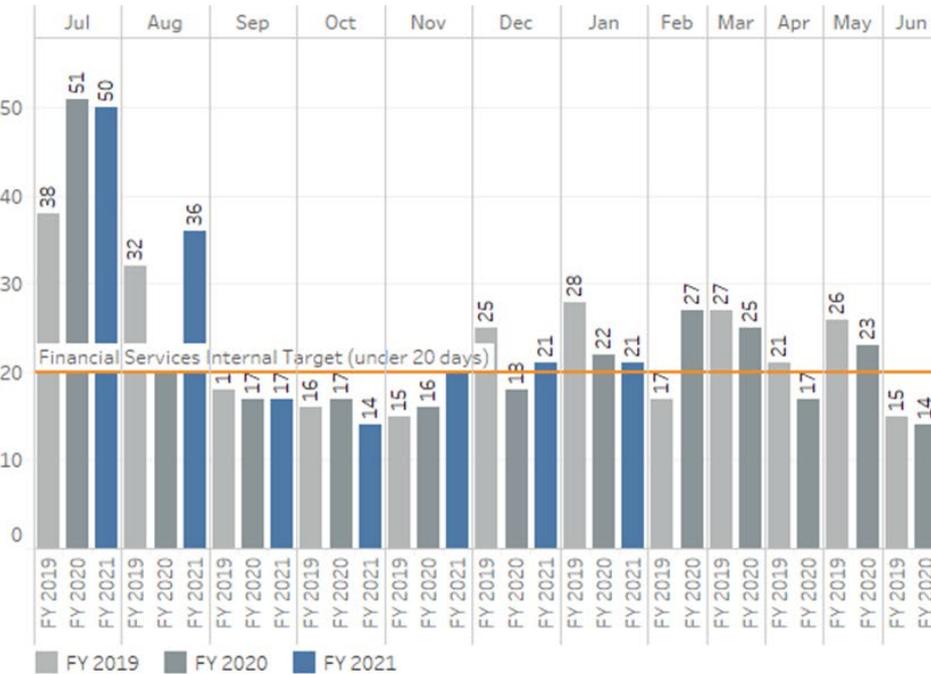
This visualization was created by DoIT in the Department of User Services.

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	1
February	6	2	
March	2	6	
April	6	7	
May	7	5	
June	5	5	

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	22
February	23	29	
March	29	31	
April	27	24	
May	33	28	
June	20	19	

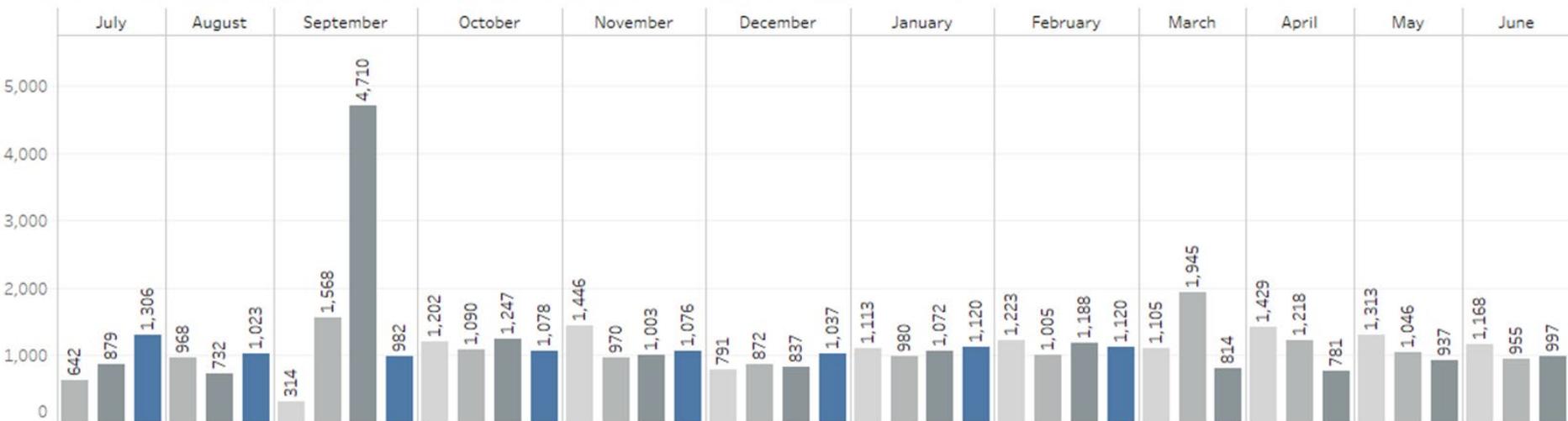
If blank, data is currently unavailable.

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)



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.

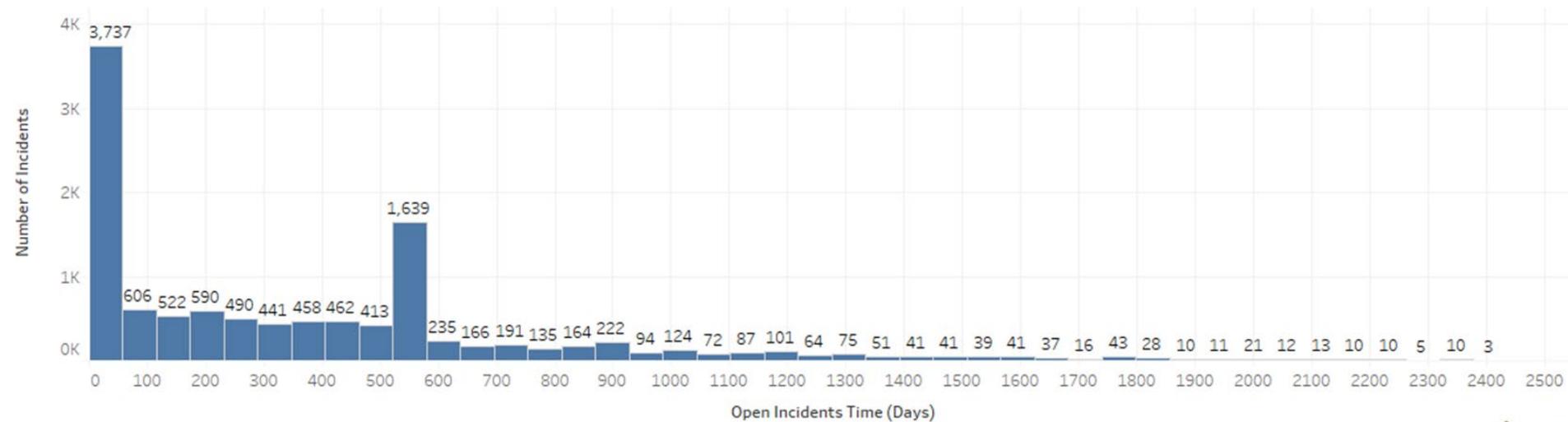
DoIT OPERATIONS: INCIDENT AGING REPORT

NOTE: Open incidents analyzed through 03/01/2021

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
ALS	61	121	116	93
Cybersecurity	199	426	2,202	2,125
NS	2	171	501	446
SEO	19	91	261	227
US	63	1,565	4,022	3,738
Other	7	267	1,560	1,482
Total	351	2,641	8,662	8,111

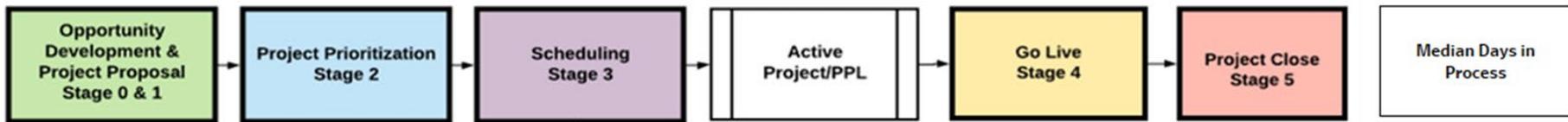
Total Open Incidents by Age (days)



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

DoIT OPERATIONS: PROJECT MANAGEMENT OFFICE PORTFOLIO METRICS

Project Portfolio Stages



Intake Stages

Median days in each stage as of 3/2/2021

0

2

1

34

N/A

35

Number of Active Projects

110

DoIT Operations Report Monthly Updates

Project Management Office Portfolio Metrics: Median days projects are in each stage throughout the Project Intake Process.

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-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

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.

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.

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).

Project Portfolio Process Stage Definitions: *Stage Zero- Opportunity Development:* Engagement with an Enterprise Architect. *Stage One- Proposed/Intake:* Project submission to the Intake process; includes days in stage zero technical review. *Stage Two- Prioritization:* Project prioritization to determine Now, Next, Later or Never category. *Stage Three- Scheduling:* Projects with multiple DoIT units involved present at a Scheduling Team meeting to identify needed talent and available capacity. *Stage Four- Project Go Live :* Project completes a go live preparation checklist with a peer review process. *Stage Five- Project Closure:* Project closes the project by completing a closure preparation checklist with a peer review process. *Total Days in Intake:* Total number of days project is in Stages Zero through Three. *Total Days in Process:* Total number of days project is in all six stages of the Project Portfolio Process



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.

