



Service Essentials

Service Desk Incident Escalation & Lifecycle Management for Resolution







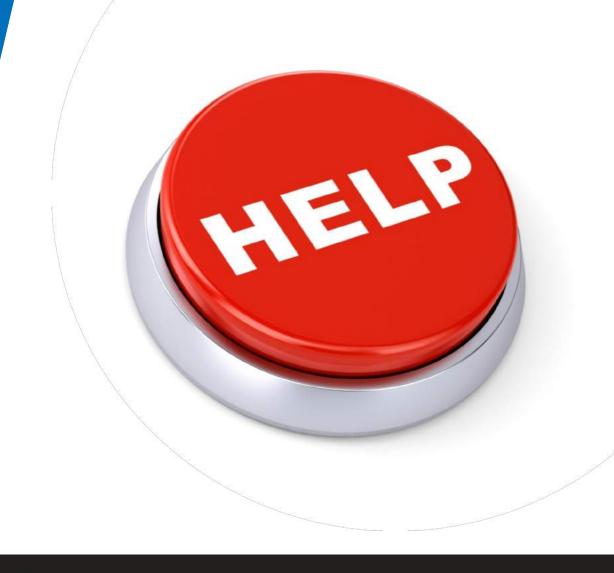






NOC vs. Service Desk

- NOC focuses on proactive and reactive equipment, operating system, application software and service support and maintenance
- Service Desk focuses on proactive and reactive end-user support











NOC and Service Desk Responsibilities



Receives all incident notifications



Records all incidents in PSA solution



Classifies all incidents and correctly documents nature, affected users, systems, hardware and services



Prioritizes all incidents for effective escalation



Troubleshoots according to **Best Practices**



Escalates incidents to maintain SLA's



Maintains consistent communication with all affected parties



Performs all scheduled maintenance activities











NOC and Service Desk Duties

NOC

Service Desk

Proactive
Maintenance
HW/OS/SW +
Services

Perform all maintenance duties such as patching, updating and optimizing Reactive Response HW/OS/SW + Services

Alert
Management
and Incident
/Problem
resolution

SLA

Maintain Service Level Agreements Reactive Response End Users

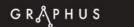
Client / End User Management and Incident/Problem resolution **SLA**

Maintain Service Level Agreements











NOC and Service Desk Processes

- Incident Management
- Problem Management
- Configuration Management
- Change Management
- Release Management
- Risk Management
- Communication Management
- Service Level Management
- Service Financial Management
- Capacity Management
- Service Continuity Management
- Availability Management
- Security Management











When Tiered, Staffed and **Trained Properly** a Best-In-Class Service Desk



Has a dedicated Service Dispatcher(s)Closes Level 1 incidents within 30-45 minutes

97% Closes up to 97% of all requests with Level 1 resolution

2% Escalates up to 2% of all request to Level 2

1% Escalates up to 1% of all requests to Level 3



Adheres to strict, established SLAs

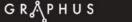
Increases client satisfaction through standardized processes and reporting

Improves net profits through efficient, remote operations (reduced truck rolls)













Incident Management vs. Problem Management

- Incident Management's purpose is to restore business continuity as quickly as possible
- Problem Management seeks to determine the root cause of recurring incidents

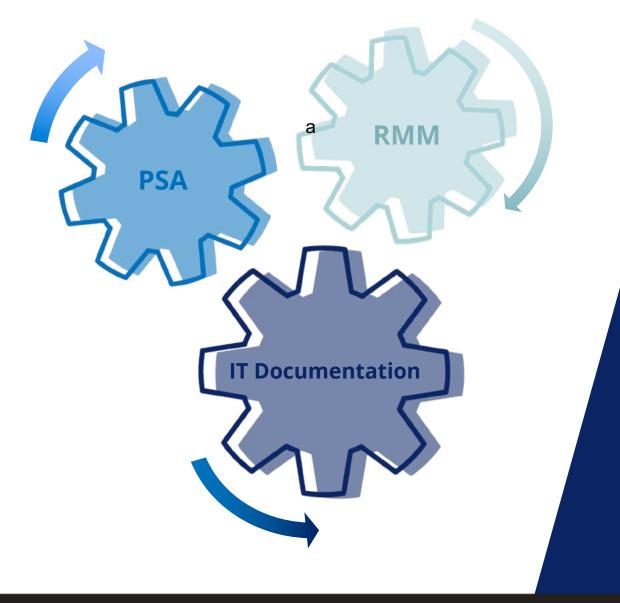












Top 3 NOC and Service Desk Tools









Priceless MSP Mastered® Service Desk Performance **Optimization Tips**



Optimize Platforms

- PSA Issue Types and Subtypes
- PSA Automated Communication, Alerting and Escalation
- RMM Noise
- Reporting



Document Processes

- SLA Management
- L1, L2, L3 & Onsite Ticket Types and Time to Resolution (TTR)
- Incident Identification, Prioritization, AssignmentIncident Management and Resolution
- Incident Fscalation



Capacity Plan Properly

- Level 1, 2, 3, Onsite Support for Maximum Utilization (N+1)
- Dispatchers











Leverage PSA to Increase Ticket Categorization **Accuracy and Reporting – Issue Types and Subtypes**

User Admin	Hardware	Network	os	Software/SaaS	
User - Contact Update	Firewall - Add/Remove/Change	BDR - Configuration	Android - Configuration	Chrome - Configuration	
User - Offboard	Firewall - Configuration	BDR - File Restore	Android - Install/Reinstall/Update	Chrome - Install/Reinstall/Update	
User - Onboard	Firewall - Troubleshooting	BDR - Server Restore	Android - Troubleshooting	Chrome - Troubleshooting	
User Rights - Add/Remove/Change	Mobile Device - Add/Remove/Change	BDR - Share Restore	Certificate - Add/Remove/Change	Citrix - Configuration	
User Rights - Password Reset	Mobile Device - Configuration	BDR - Test Restore	Certificate - Configuration	Citrix - Install/Reinstall/Update	
User Rights - Profile Troubleshooting	Mobile Device - Troubleshooting	BDR - Troubleshooting	Certificate - Troubleshooting	Citrix - Troubleshooting	
	Monitor(s) - Add/Remove/Change	Internet - Add/Remove/Change	DHCP - Add/Remove/Change	Driver - Configuration	
	Monitor(s) - Configuration	Internet - Configuration	DHCP - Configuration	Driver - Install/Reinstall/Update	
	Monitor(s) - Troubleshooting	Internet - Troubleshooting	DHCP - Troubleshooting	Driver - Troubleshooting	
	Peripheral - Add/Remove/Change	Intranet - Add/Remove/Change	DNS - Add/Remove/Change	eClinical Works - Configuration	
	Peripheral - Configuration	Intranet - Configuration	DNS - Configuration	eClinical Works - Install/Reinstall/Update	
	Peripheral - Troubleshooting	Intranet - Troubleshooting	DNS - Troubleshooting	eClinical Works - Troubleshooting	
	Printer - Add/Remote/Change	LAN - Add/Remove/Change	iOS - Configuration	Edge - Configuration	
	Printer - Configuration	LAN - Configuration	iOS - Install/Reinstall/Update	Edge - Install/Reinstall/Update	
	Printer - Troubleshooting	LAN - Troubleshooting	iOS - Troubleshooting	Edge - Troubleshooting	
	Router - Add/Remove/Change	VPN - Add/Remove/Change	Linux - Configuration	Internet Explorer - Configuration	
	Router - Configuration	VPN - Configuration	Linux - Install/Reinstall/Update	Internet Explorer - Install/Reinstall/Update	
	Router - Troubleshooting	VPN - Troubleshooting	Linux - Troubleshooting	Internet Explorer - Troubleshooting	
	Scanner - Add/Remove/Change	WAN - Add/Remove/Change	Mac OS - Configuration	KnowBe4 - Configuration	
	Scanner - Configuration	WAN - Configuration	Mac OS - Install/Reinstall/Update	KnowBe4 - Install/Reinstall/Update	
	Scanner - Troubleshooting	WAN - Troubleshooting	Mac OS - Troubleshooting	KnowBe4 - Troubleshooting	
	Switch - Add/Remove/Change		Mapped Drive - Add/Remove/Change	MS Office - Configuration	
	Switch - Configuration		Mapped Drive - Configuration	MS Office - Install/Reinstall/Update	
	Switch - Troubleshooting		Mapped Drive - Troubleshooting	MS Office - Troubleshooting	
	Workstation - Add/Remove/Change		Print Management - Add/Remove/Change	One Drive - Configuration	
	Workstation - Configuration		Print Management - Configuration	One Drive - Install/Reinstall/Update	
	Workstation - Troubleshooting		Print Management - Troubleshooting	One Drive - Troubleshooting	
			Server OS - Configuration	Outlook - Configuration	











Leverage PSA Automation to Maintain SLAs Alerting and Escalation

Priority	Internal Response Time	Client Response Time	Resolution Time	Escalation threshold
1	Within 30 Minutes	Within 1 hours between 8am-5pm M-F	ASAP - Best Effort	2 hours
2	Within 2 Hours	Within 4 hours between 8am and 5pm M-F	ASAP - Best Effort	8 hours
3	Within 12 Hours	Within 24 hours between 8am and 5pm M-F	ASAP - Best Effort	48 hours
4	Within 24 Hours	Within 48 hours between 8am and 5pm M-F	ASAP - Best Effort	96 hours

New Ticket 1. Email client that we received ticket, we will assign it to the appropriate technician to begin work

- 2. Alert Dispatcher if not assigned in 15 minutes
- 3. Alert Dispatcher and Service Manager if not assigned in 20 minutes
- 4. Alert Dispatcher, Service Manager and Service Director if not assigned in 30 minutes

Assigned 1. Email Alert to client that a technician has been assigned and is reviewing the incident. Engineer will be contacting you shortly.

- 2. Email Engineer they have been assigned a ticket(already done currently)
- 3. Alert Engineer if not acknowledged in .25 hour
- 4. Alert Engineer and Dispatcher if not acknowledged in .50 hours
- 5. Alert Engineer, Dispatcher and Service Manager if not acknowledged in .75 hours
- 6. Alert Engineer, Dispatcher, Service Manager and Service Director if not acknowledged in 1 hour

Escalate in 2 1. Email Alert to customer that the incident has been escalated to Tier 3 support technician

hours 2. Email Alert to Dispatcher - Ticket needs to be escalated

- 3. Email Alert to Engineer this has been escalated to them
- 4. Alert Engineer and Dispatcher if new engineer hasn't acknowledged in .25 hour
- 5. Alert Engineer, Dispatcher and Service Manager if not acknowledged in .50 hours
- 6. Alert Engineer, Dispatcher, Service Manager and Service Director if not acknowledged in .75 hours











Leverage PSA Automation to Reduce Costly Labor - Client Communication and Ticket Closure

Status	Event	Action	То	Details								
	Alert	Send Email		Alert	Send Email	Contact for this item	A team meml to Ticket# / T will be review service reque additional inf like to provid		Alert after 24 hours since last update	Send Email	Assigned Resource	Please make sure to keep this ticket up to date and note any and all customer contact attempts that have been made. There should be 3 attempts to contact the customer before the ticket is moved to completed status.
New			Assigned				please email- support@you Thanks for yo Your Name Your Compar					Dear <contact>, We have made several attempts to reach you regarding Ticket #/Ticket description. If we do not hear back from you within 24 hours, we will</contact>
	Resource has been assigned	Change Stutus	0	Resource Acknowledgment	Change Status	In Progress						assume the issue to be unimportant at this time and close this ticket. If you still need assistance at a later
							Hello <contac< td=""><td></td><td></td><td></td><td></td><td>time, please submit another service</td></contac<>					time, please submit another service
			In Progress	Alert	Send Email	Contact for this item	A team meml on your Ticke You will be up progress on t changes. Thanks for yo	Waiting on Client	Alert after 72 hours in status	Send Email	Contact for this item	request ticket when you are available to assist us in troubleshooting the issue. If this is sent in error, please reply to support@yourcompanyurl.com and
Assigned	Alert	Send Email	C				Your Name Your Compar		Alert after 96 hours in	Send Email	Service Dispatcher	we will make the appropriate changes.
				Alert after 24 hours of no time entered	Send Email	Assigned Resource	HI <assigned #="" has="" t="" td="" ticket="" time="" updates<=""><td></td><td>Thank You, Your Name Your Company Name</td></assigned>					Thank You, Your Name Your Company Name
							Please be sur on an ongoin appropriate r					The customer has not responded after 3 attempts. Please verify the assinged resource has made the appropriate number of attempts to
	Resource Acknowledgment	Change Status		Alert after 48 hours of no activity	Send Email	Service Dispatcher	Ticket # fo updated by 48 hours. Pl resource		status	Sena Email	Service Dispatcher	contact ** including at least 1 phone call**. If conditions have been met, please change the status to closed.
							10:55:50:50:50		Alert	Status Change	Closed	











Leverage Documentation Platform to Improve Efficiencies and CX – Incident Management Processes

- Application Wont Start Troubleshooting Process.docx
- Data Backup Troubleshooting Process.docx
- Disable System Sleep or Hibernate from the Command Line.docx
- Email Locating Domain Spam System and MX Records (MXtoolbox).docx
- Internet Problems Troubleshooting Process.docx
- Local or Hosted Email Not Working Troubleshooting Process.docx
- Monitor Display Troubleshooting.docx
- Office 365 Add a User or Contact to a Distribution Group.docx
- Office 365 Enable Unlimited Archiving.docx
- Office 365 Licensing Issues.docx
- Office 365 Outlook Continually Asking for Password.docx
- Office 365 Shared Mailbox Configure Permissions.docx
- Office 365 Updating AD Synced User information.docx
- PC Will Not Boot Troubleshooting Process.docx
- Printing Add New Printer.docx
- Printing Not in Color.docx
- Printing Printer Missing.docx
- Printing Printer Offline.docx
- Printing Wrong Size Paper.docx
- QuickBooks H202 Error Stuck in single user mode.docx
- Remote Access Not Working Troubleshooting Process.docx

- Sage Display Issues.docx
- Sage Password Reset.docx
- Setup User in Active Directory Process.docx
- SharePoint Add Remove User Permissions.docx
- Spam Email Verification.docx
- Spam Office 365 Blacklist Whitelist.docx
- Unitrends Backup Restore files and folders.docx
- User Admin New User Creation Onboard SOP.docx
- User Admin Password Reset.docx
- User Admin User Termination Offboard SOP.docx
- User Cant Print Troubleshooting Process.docx
- User Has No Access to Network Files Troubleshooting Process.docx
- User Unable to Log In Troubleshooting Process.docx
- VPN First Time Setup Installation.docx
- VPN Unable to Login.docx
- Windows Change Password from CMD Line.docx
- Windows no logon servers available to service the logon request.docx
- Windows Remote Access Slow.docx
- Windows Shared Drive Troubleshooting.docx
- Windows Server File Folder Permissions.docx











Resource Capacity Planning for Service Desk Techs and Dispatchers

Based On

- Total Ticket Count Per Year
- % of Tier 1, 2, 3 and Onsite Tickets
- SLA

Required Data

- Total Tickets
- Tiering and Onsite Ticket Segmentation %
- Time Allotted Per Ticket Type Before Escalation
- Number of Hours Available by Tech per Month
- Number of Available Techs Per Tier
- Number of Available Dispatchers

Expected % of Tier 1 Tickets out of 100%	90%			
Expected % of Tier 2 Tickets out of 100%	7%			
Expected % of Tier 3 Tickets out of 100%	3%			
Expected % of Overall Tickets Escalated to Onsite Support	10%			
Trouble Ticket Calculation	Tier 1	Tier 2	Tier 3	Onsite
Number of tickets per year (calls, email and/or Web requests)	30000	2100	900	3000
Targeted work time per ticket (in minutes)	45	90	180	180
Total required work hours per help desk tier	22500	3150	2700	9000
Help Desk Staffing	Tier 1	Tier 2	Tier 3	Onsite
Current existing number of technicians per tier	20.00	3.00	1.00	5.00
Forecasted number of FTE technicians needed per tier	20.59	2.88	2.47	8.24
Over/Under Capacity	-0.59	0.12	-1.47	-3.24
Dispatch Staffing				
Current existing number of Dispatchers	1.00			
Forecasted number of Dispatchers needed	1.25			
Over/Under Capacity	-0.25			





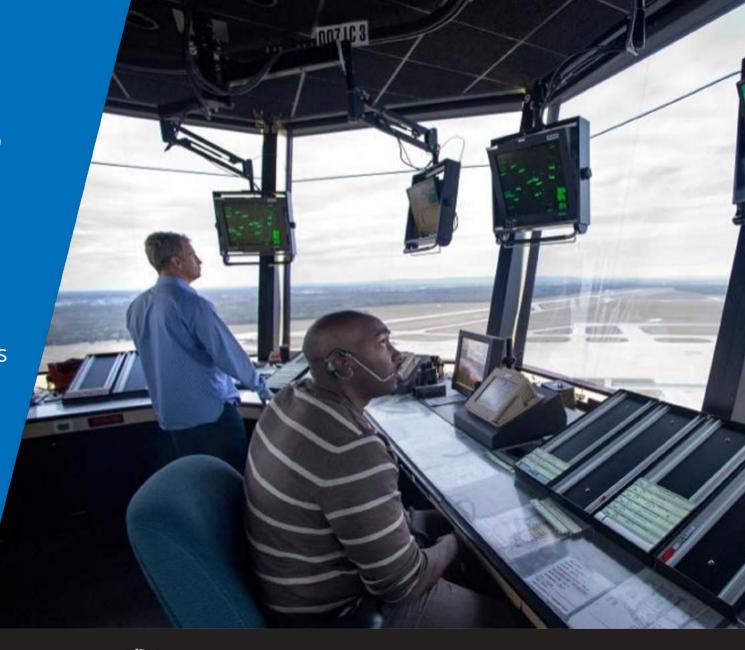






The Service **Dispatch Process**

- Participates in the provider's problem management and resolution process
- Assigns and manages resources and parts/availability
- Schedules remote, onsite and in-house services
- Interacts with the client to maintain and improve satisfaction
- Ensures service adherence to established SLAs
- Is responsible for the status and resolution of each and every service request
- Provides reporting





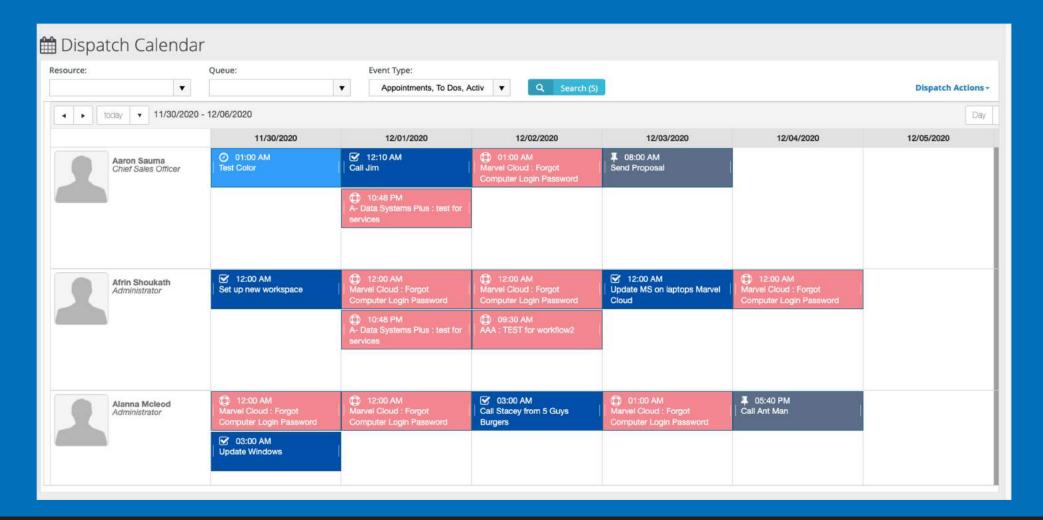






GRAPHUS

Dispatch Incident Assignment and Escalation













The 3 Phases of Incident Management

01

Identification and Logging

•Identify the incident through existing knowledgebase, network analysis, service level degradation 02

Prioritization and Resource Allocation

• Classify the problem (hardware, software, service, impact) and assign resources for analysis 03

Analysis and Diagnosis

 Analyze the problem to determine cause and propose solution 04

Propose Solutions

Evaluate impact of proposed solutions

05

Solve (RFC)

 Request For Change Implement solution (change management 06

Review (PIR)

 Post-Implementatio Review – Monitor the results of change and problem closure

Identification
Prioritization
Assignment

2 Analysis
Diagnosis













The 7 Step Incident Management Process



RECEIPT - SERVICE REQUEST IS RECEIVED



- TROUBLE TICKET IS CREATED



- ISSUE IS
IDENTIFIED AND
DOCUMENTED



QUALIFICATION

- ISSUE IS

QUALIFIED TO

DETERMINE IF IT

CAN BE RESOLVED

IN TIER 1



IMR
- ISSUE IS WORKED
TO SUCCESSFUL
RESOLUTION



QC
- ISSUE IS VERIFIED
TO BE RESOLVED
TO CLIENT'S
SATISFACTION



CLOSE
- ISSUE IS CLOSED
AFTER COMPLETE
IMR ACTIVITIES
ARE DOCUMENTED









If Issue Cannot Be Resolved in Tier 1...







4.2. QUALIFICATION – ISSUE IS QUALIFIED TO DETERMINE IF IT CAN BE RESOLVED IN TIER 2





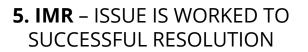






If Issue Can Be Resolved in Tier 2...







6. QC – ISSUE IS VERIFIED TO BE **RESOLVED TO CLIENT'S SATISFACTION**



7. CLOSE - ISSUE IS CLOSED AFTER COMPLETE IMR ACTIVITIES ARE DOCUMENTED









If Issue Cannot Be Resolved in Tier 2...



4.3 ESCALATION – ISSUE IS ESCALATED TO TIER 3



4.4 QUALIFICATION – ISSUE IS QUALIFIED TO DETERMINE IF IT CAN BE RESOLVED IN TIER 3











If Issue Can Be Resolved in Tier 3...







5. IMR – ISSUE IS WORKED TO SUCCESSFUL RESOLUTION

6. QC – ISSUE IS VERIFIED TO BE RESOLVED TO CLIENT'S SATISFACTION

7. CLOSE – ISSUE IS CLOSED
AFTER COMPLETE IMR ACTIVITIES
ARE DOCUMENTED











If Issue Cannot Be Resolved in Tier 3...





4.4 ESCALATION – ISSUE IS ESCALATED TO ONSITE SUPPORT

4.5 QUALIFICATION – ISSUE IS QUALIFIED TO DETERMINE IF IT CAN BE RESOLVED ONSITE











If Issue Can Be Resolved Onsite...







6. QC – ISSUE IS VERIFIED TO BE RESOLVED TO CLIENT'S SATISFACTION



7. CLOSE – ISSUE IS CLOSED
AFTER COMPLETE IMR ACTIVITIES
ARE DOCUMENTED











If Issue Cannot Be Resolved Onsite...



IT/SERVICE MANAGER **DECISION POINT**











NOC and Service Desk Key Performance Indicators

- Trouble Tickets Closed Within SLA Yesterday
- Trouble Tickets Carryover From Yesterday
- Trouble Tickets Closed Last Week
- Trouble Tickets Pending
- Onsite Service Appointments Completed Yesterday
- Onsite Service Appointments Rescheduled Yesterday
- Managed Services Hours Logged/Billed Yesterday
- Project Hours Logged/Billed Yesterday
- Non-Billable Hours Logged Yesterday
- Onsite Service Hours Logged/Billed Yesterday
- Utilization/Realization by Technician
- Profitability by Client, Agreement, Project, Technician











UPCOMING WEBINARS





NIST Cybersecurity Framework -- The
Swiss Army Knife of Cybersecurity

Wednesday, May 19th | 1 PM EST | 10 AM PST

RapidFireTools*

