

The ISO 20000 *guide*



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All rights reserved. This material & its contents (“Material”) are intended, among other things, to present a general overview of how you can use ManageEngine’s products and services to facilitate compliance with the ISO 20000 certification. Fully complying with the ISO 20000 requires a variety of solutions, processes, people, and technologies. The solutions mentioned in this Material are some of the ways in which IT management tools can help with some of the ISO 20000’s requirements. Coupled with other appropriate solutions, processes, and people, ManageEngine’s solutions help achieve and sustain ISO 20000 certification. This Material is provided for informational purpose only and should not be considered as legal advice for ISO 20000 compliance. ManageEngine makes no warranties, express, implied, or statutory and assumes no responsibility or liability as to the information in this Material.

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How ManageEngine can help you in complying with the ISO 20000 standard

ManageEngine's comprehensive suite of IT management solutions encompasses tools that can help your organization effectively fulfill the requirements for ISO 20000 compliance. These tools will help you easily integrate the mandated processes as per the ISO 20000-1:2018 requirement document in your organization's operations, and generate evidence necessary for conformance.

Regulations and certifications that ManageEngine products comply with:

ManageEngine solutions comply with a number of standards and certifications including:

ISO/IEC 27001:

One of the most widely recognized independent international security standards. ManageEngine has earned ISO/IEC 27001:2013 certification for Applications, Systems, People, Technology, and Processes.

SOC 2 Type II:

An evaluation of the design and operating effectiveness of controls that meet the AICPA's Trust Services Principles criteria.

GDPR:

A pan-European regulation that requires businesses to protect the personal data and privacy of EU citizens for the processing of their personal data.

ISO/IEC 27017:

The information technology, security techniques, and code of practice for information security controls based on ISO/IEC 27002 for cloud services, a standard that gives guidelines for information security controls applicable to the provision and use of cloud services.

ISO/IEC 27018:

A standard that establishes commonly accepted control objectives, controls, and guidelines for implementing measures on safeguarding the PII that is processed in a public cloud. ISO/IEC 27018 provides guidance to organizations concerned about how their cloud providers are handling personally identifiable information (PII).

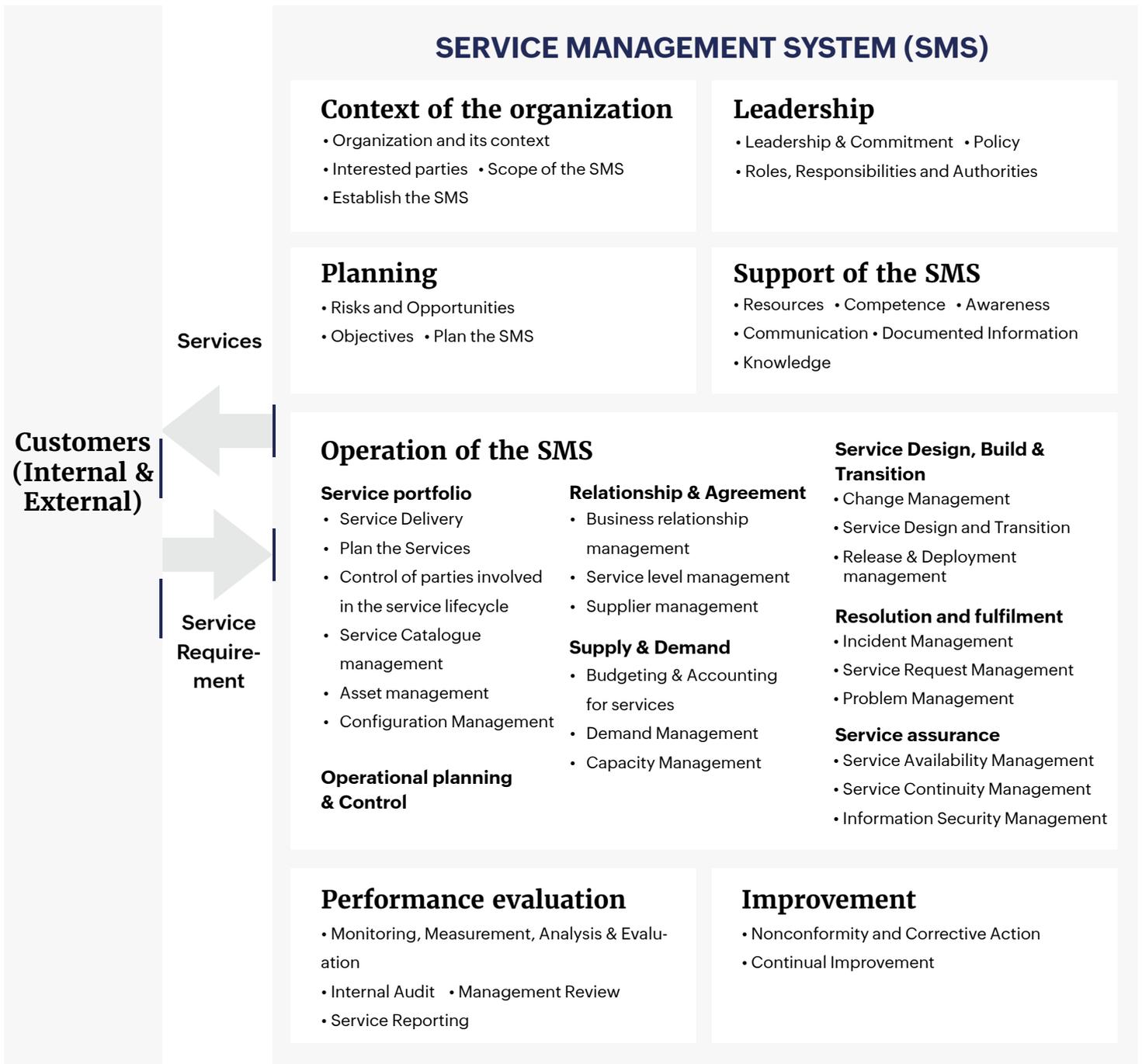


ManageEngine products that help in ISO 20000 compliance:

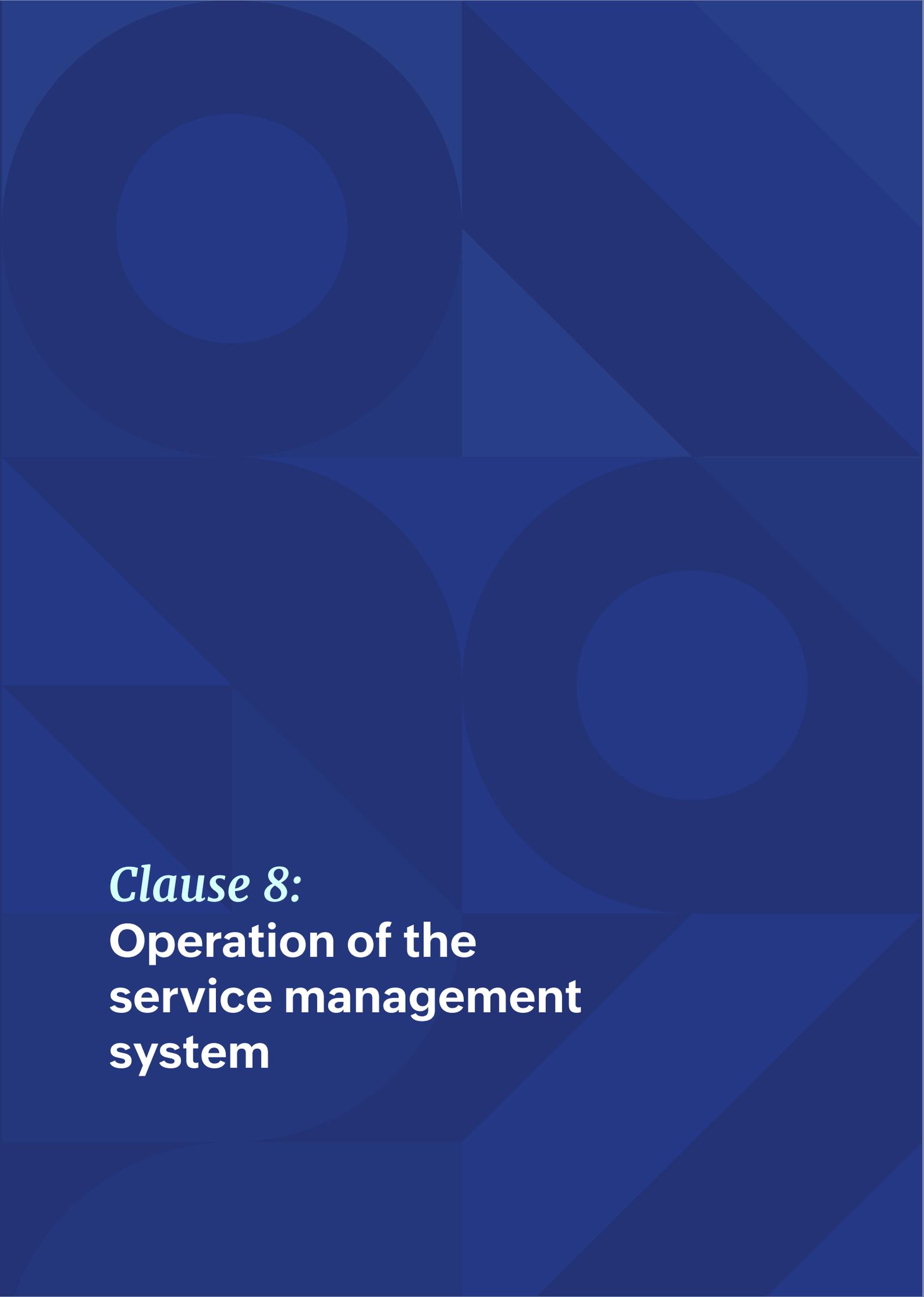
- **ServiceDesk Plus:** Full-stack ITSM suite
- **Analytics Plus:** An on-premises reporting and business intelligence solution
- **OpManager Plus:** An integrated network performance management solution
- **Applications Manager:** A server and application performance monitoring solution
- **Log360:** A comprehensive security information and event management tool
- **PAM360:** A comprehensive privileged access management (PAM) solution
- **AD360:** An integrated identity and access management (IAM) solution
- **Endpoint Central:** A unified endpoint management (UEM) solution

Process requirement mapping

This section elaborates on how ManageEngine solutions can help your organization support different processes mentioned under various clauses in the ISO 20000-1



The mandatory requirements mentioned in ISO 20000-1 that need to be fulfilled for certifica-



Clause 8:
**Operation of the
service management
system**

8.2 Service portfolio

8.2.4 Service catalog management

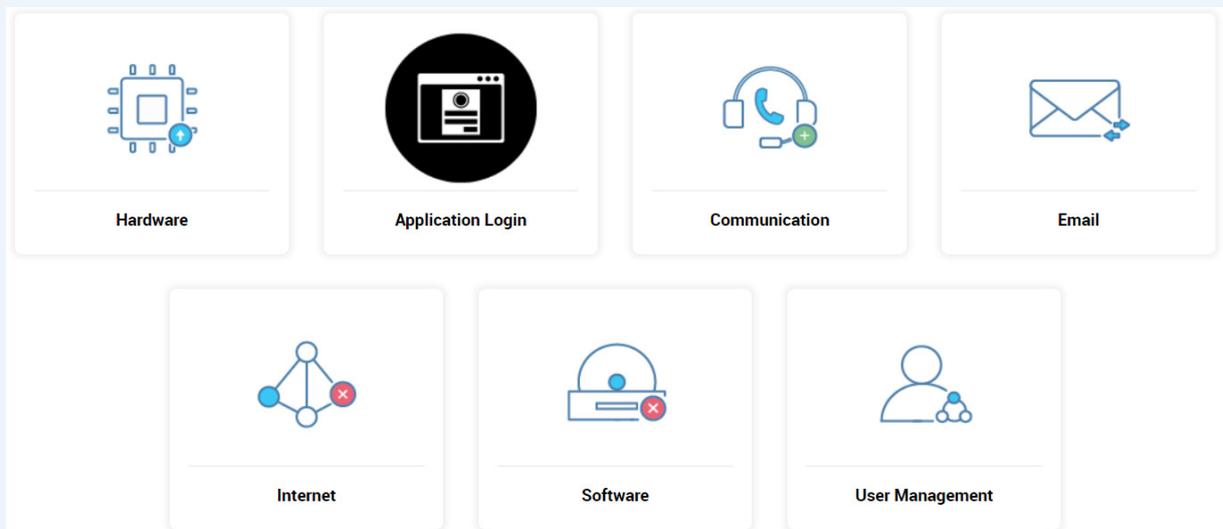
Addressed process requirement(s):

- Create and maintain one or more service catalogs with information related to customers, users, interested parties, and service dependencies.

ManageEngine product that can help in implementing this process:

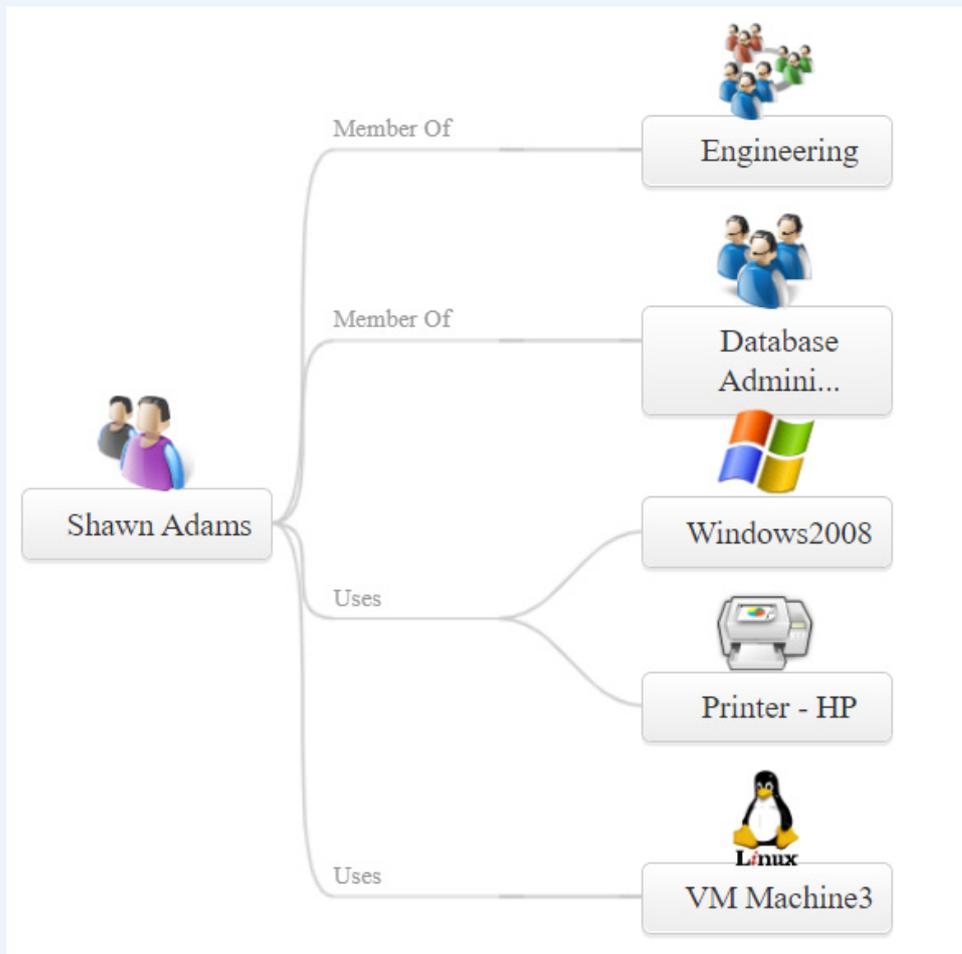
ServiceDesk Plus

- The customizable service catalog module will help you create and publish your organization's services.



Service categories in the service catalog

- The configuration management database (CMDB) module organizes all the services in one place as configuration items and helps you maintain the details related to the services, including interested parties and service dependencies.



Dependencies and user relationships

8.2.5 Asset management

Addressed process requirement(s):

- Ensure assets used to deliver the services are managed to meet the service requirements.

ManageEngine product that can help in implementing this process:

ServiceDesk Plus

- The asset management module is packed with thoughtful features, including multiple methods of scanning assets, agent-based and agent-less methods, barcode scans, network scans, and more to help you manage all the assets and their related inventory used to deliver the services. It also seamlessly integrates with other ITSM processes including incident, problem, and change management to help you track all tickets associated to the assets.

Scan Summary

Workstation/Server Detected	20	Workstation/Server not scanned in last 7 days	20
Workstation/Server Invented	9	Hardware changes in last 7 days / 30 days	
Workstation/Server failed during last scan	11 [Troubleshoot]	Software changes in last 7 days / 30 days	

Next Scan Schedule: Not configured . [Configure Now](#)

[Agent Configuration](#) [Download Windows Agent](#) [Download MAC Agent](#) [Download Linux Agent](#)

Asset Status

All assets In Store	33
Unassigned Workstation	4 [Auto Assign]
All Assets In Use	12
All assets In Repair	1

Groups [New Group](#) [Manage Groups](#)

- DG-1

Asset management dashboard

Windows Server 2022 10.53.10.175

VMware7.1 - VMware, Inc. (Server) Assigned To User: administrator (Department: Administration)

Asset Details

Asset	Windows Server 2022	Model	VMware7.1
Asset State	In Use	Disk space (GB)	199.99 GB
Agent Version	10.1.2137.11.W	Warranty Expiry Date	Jun 30, 2023
Asset Tag	3JH4454543H853234	Barcode	-
Org Serial Number		Vendor	Microsoft
Acquisition Date	Jun 1, 2021	Part No.	-
Expiry Date	Jun 29, 2023	Purchase Order No.	-
Allowed VMs	-	Description	
Last Boot Time	Feb 1, 2022 04:39 PM	Agent Installed Time	Feb 28, 2022 05:19 PM
Serial Number	3JH9AWH853234	Last Contact Time	Apr 20, 2022 02:23 PM
Hard Disk Size	1TB	DNS Name	-

Scan Success

✓ SUCCESS : Device scanned successfully and added as an asset

Scan Now

Scan Status : SUCCESS
 Last scanned : Apr 20, 2022 06:44 AM
 Scan type : UEM Agent
 Scan Mode :
 Asset State : In Use
 Is Loaned : No

administrator

Employee ID : 009
 Department Name : Administration
 Phone : 1234455
 Desk No : -

Inventory details of the asset

8.2.6 Configuration management

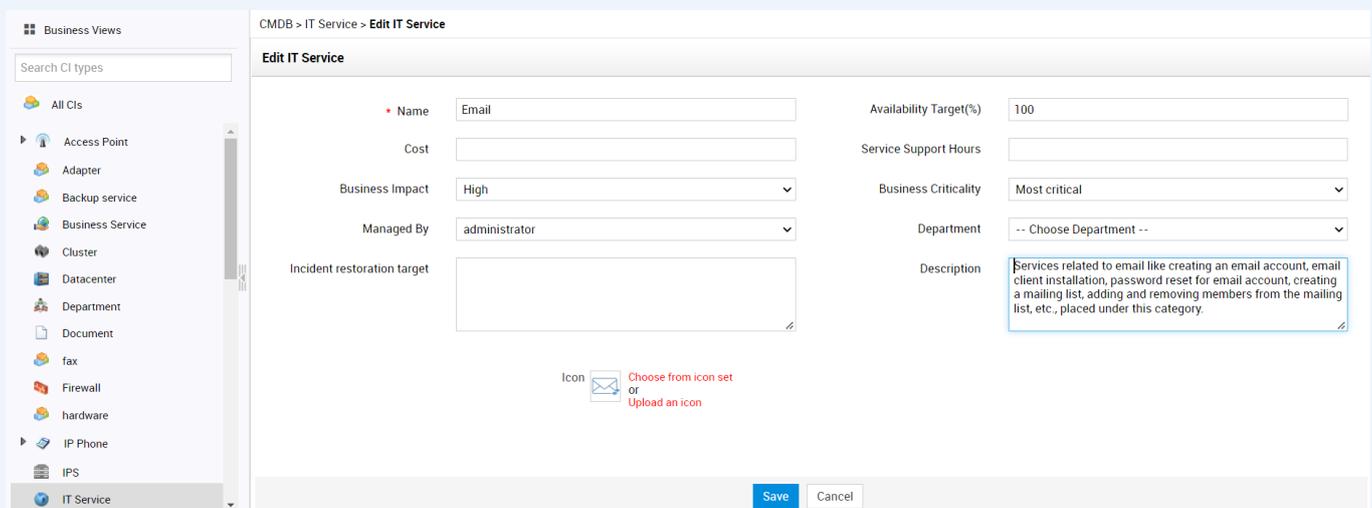
Addressed process requirement(s):

- Services shall be classified as configuration items (CIs) configuration information for each CI will include a unique identification, type, description, relationship, and status.

ManageEngine product that can help in implementing this process:

ServiceDesk Plus

- Services are classified as CIs in the CMDB module. All CI types are configurable to maintain specific attributes like name, type, description, status, etc. and help to build visual relationships between CIs.



The screenshot displays the 'Edit IT Service' form in the ManageEngine ServiceDesk Plus CMDB module. The breadcrumb path is 'CMDB > IT Service > Edit IT Service'. The form is titled 'Edit IT Service' and contains the following fields:

- Name:** Email
- Cost:** (empty text box)
- Business Impact:** High (dropdown menu)
- Managed By:** administrator (dropdown menu)
- Incident restoration target:** (empty text box)
- Availability Target(%):** 100
- Service Support Hours:** (empty text box)
- Business Criticality:** Most critical (dropdown menu)
- Department:** -- Choose Department -- (dropdown menu)
- Description:** Services related to email like creating an email account, email client installation, password reset for email account, creating a mailing list, adding and removing members from the mailing list, etc., placed under this category.

At the bottom of the form, there is an 'Icon' section with a dropdown menu and the text 'Choose from icon set or Upload an icon'. The form has 'Save' and 'Cancel' buttons at the bottom right.

Information related to a particular CI in the CMDB

8.3 Relationship and agreement

8.3.2 Business relationship management

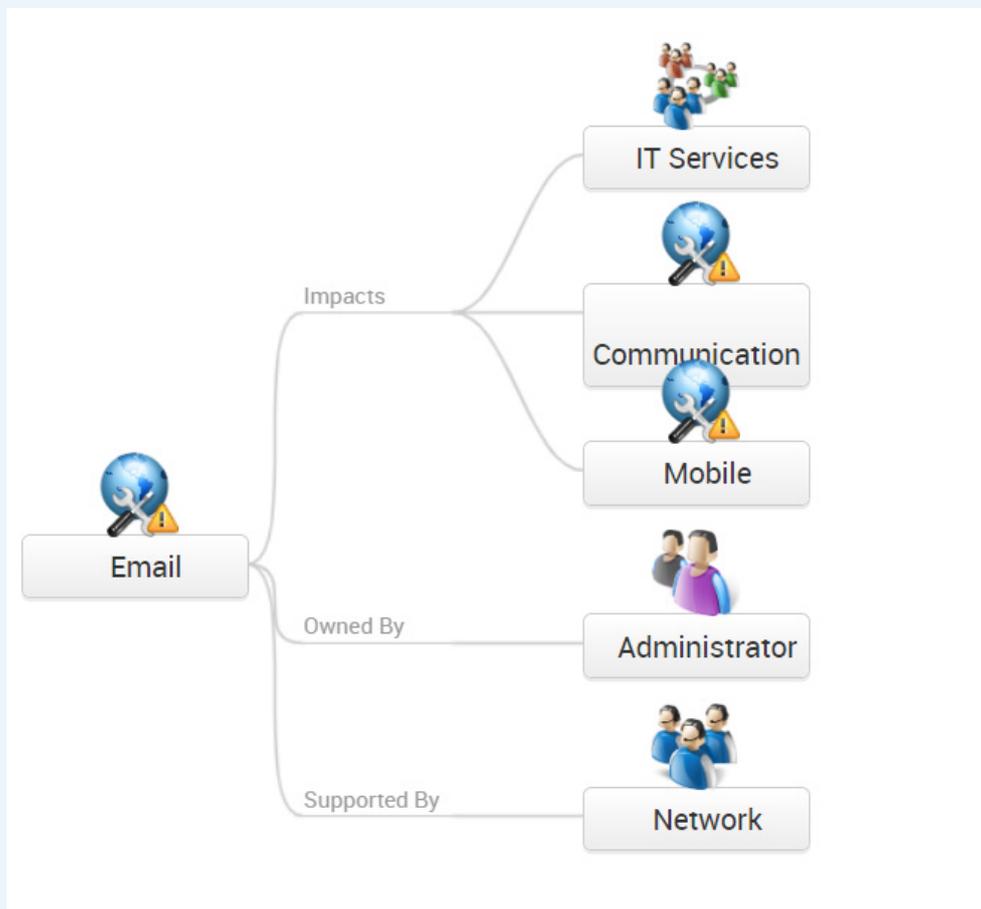
Addressed process requirement(s):

- Document customers, users, and other interested parties related to the services.
- Review the performance and satisfaction with the services based on samples at planned intervals.
- Service complaints shall be recorded and managed to closure. If not resolved,

ManageEngine product that can help in implementing these processes:

ServiceDesk Plus

- Visual relationships in the CMDB module document the details related to the services.



Relationships with users mapped in the CMDB

- Satisfaction with services can effectively be measured using the survey module at planned intervals. Reporting is extended to identify opportunities for improvement and measure the performance trends.

Service Performance Review x

1 Please rate your overall satisfaction with the IT Services been provided to you. *

1
 2
 3
 4
 5

2 In your opinion, where do we stand in terms of our commitments like delivery of services, resolution of issues, etc?

1	2	3	4	5
---	---	---	---	---

Low
Mid
High

3 Based on your experience in the past, how do you rate the knowledge of the IT team?

Knowledgeable
 Need Training

4 How do you rate the quality of IT Services been provided to you?

Very Poor
 Poor
 Average
 Good
 Excellent

Additional Comment

[Submit](#)

Periodic survey for performance review

- A separate incident template with customized forms and fields can be defined to log service complaints, which can follow its process and if not resolved, escalated.

Service Categories ▸ Helpdesk

Report an IT Incident

Use this form to report any IT issues

Submit your Feedback/Complaint

Use this form to share your feedback/complaint to improve IT Services

Incident and service complaint templates

8.3.3 Service level management

Addressed process requirement(s):

- Agree on the services to be delivered, and establish one or more service level agreements (SLAs), including service-level targets, workload limits, and exceptions.
- Monitor, review, and report on service level targets and workloads, and identify opportunities for improvement if SLA(s) are not met.

ManageEngine product(s) that can help in implementing these processes:

ServiceDesk Plus and Analytics Plus

- The services agreed to be delivered can be exhibited and maintained with the help of the service catalog module. The incident and service request SLA(s) for response/resolution/fulfillment corresponding to these services can be assigned and their effectiveness can be monitored, reviewed, and reported on by

The screenshot displays the configuration page for an SLA rule in ManageEngine ServiceDesk Plus. At the top, it asks to 'Match the below criteria' with radio buttons for 'Match ALL of the following (AND)' (selected) and 'Match ANY of the following (OR)'. Below this, a 'Rule' section contains two criteria: 'Priority is "High"' and 'Service Category is "Brand Websites"', connected by an 'and' operator. A '--- Select Criteria ---' dropdown and a 'Choose' button are also present. The 'Response Time' is set to 0 Days, 30 Hours, and 0 Minutes, with a summary box showing 'Response Time : 0 Hrs 30 Mins'. The 'Resolution Time' is set to 0 Days, 2 Hours, and 0 Minutes, with a summary box showing 'Resolution Time : 2 Hrs 0 Mins'. There are three checkboxes for 'Should be resolved/responded irrespective of operational hours', 'Should be resolved/responded irrespective of Holidays', and 'Should be resolved/responded irrespective of Weekends'. Under 'If response time is elapsed then escalate:', the 'Enable Level 1 Escalation' checkbox is unchecked. Under 'If resolution time is elapsed then escalate:', the 'Enable Level 1 Escalation' checkbox is checked. An 'Escalate to' dropdown menu is empty, with a 'Choose' button next to it. Below this, there are radio buttons for 'Escalate Before' (selected) and 'Escalate After', followed by a time selector set to 0 Days, 0 Hours, and 0 Minutes. At the bottom, under the 'Actions' section, there are three unchecked checkboxes for 'Enable Level 2 Escalation', 'Enable Level 3 Escalation', and 'Enable Level 4 Escalation'.

Incident SLA: Response, resolution, and escalation

When a new Service Request arrives :

Service Requests should be responded within : Days Hours Minutes

Service Requests should be fulfilled within : Days Hours Minutes

- Should be fulfilled/responded irrespective of operational hours.
- Should be fulfilled/responded irrespective of Holidays.
- Should be fulfilled/responded irrespective of Weekends.

If the response time is about to be elapsed/elapsed then escalate:

Enable Level 1 Escalation

Escalate to

Escalate Before Escalate After Days Hours Minutes

[Actions](#)

If the fulfillment time is about to be elapsed/elapsed then escalate:

Enable Level 1 Escalation

Escalate to

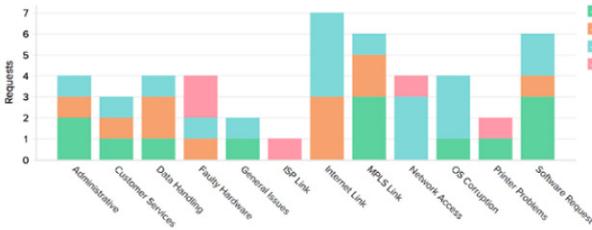
Escalate Before Escalate After Days Hours Minutes

[Actions](#)

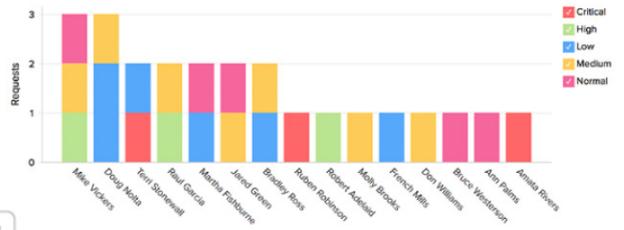
- Enable Level 2 Escalation
- Enable Level 3 Escalation
- Enable Level 4 Escalation

Service request SLA: Response and fulfillment

Areas With Highest Customer Dissatisfaction



Backlog Analysis by Customer



SLA Compliance vs Breached Trend - Last 12 Months



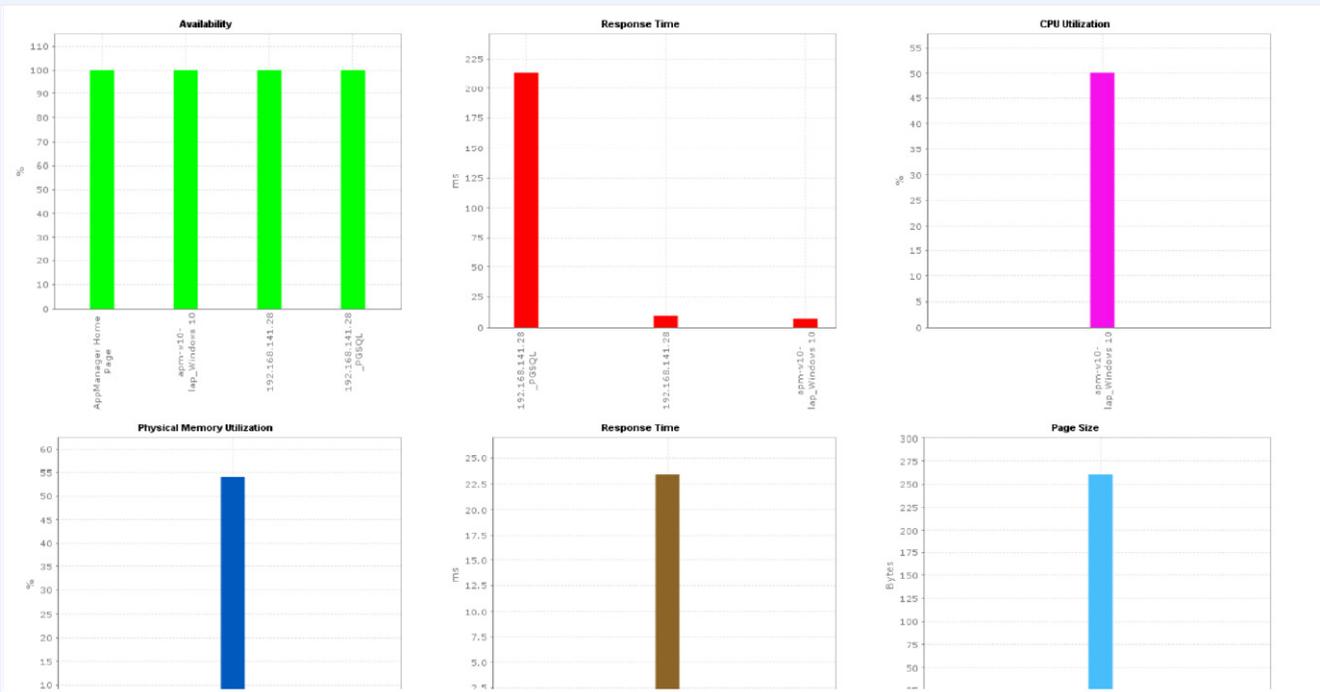
Request Resolution Time by Age Tier



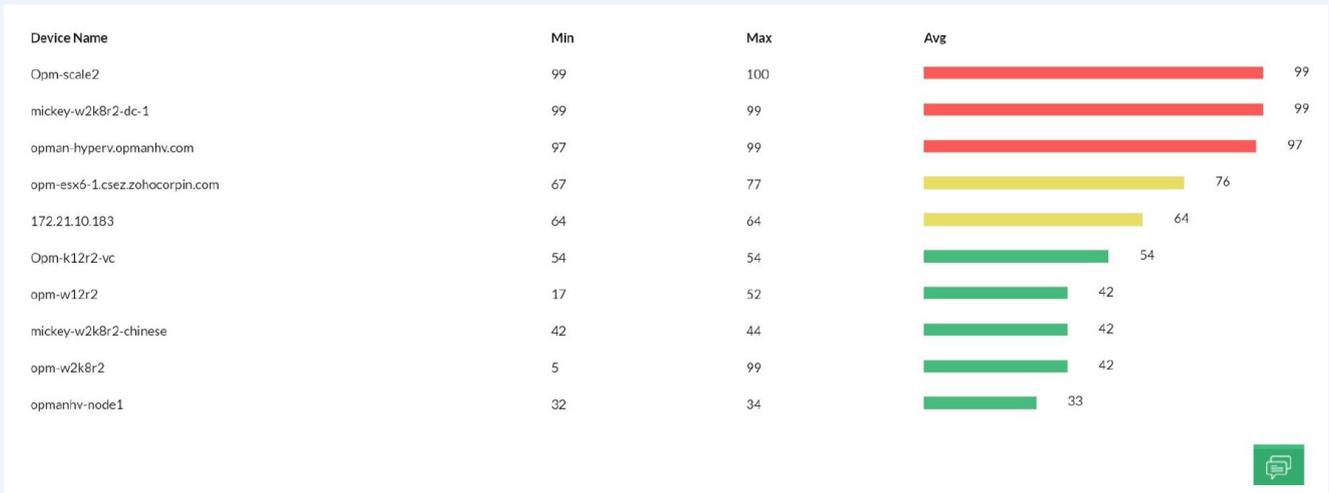
Reporting on SLA targets (incident and service request)

OpManager Plus and Applications Manager

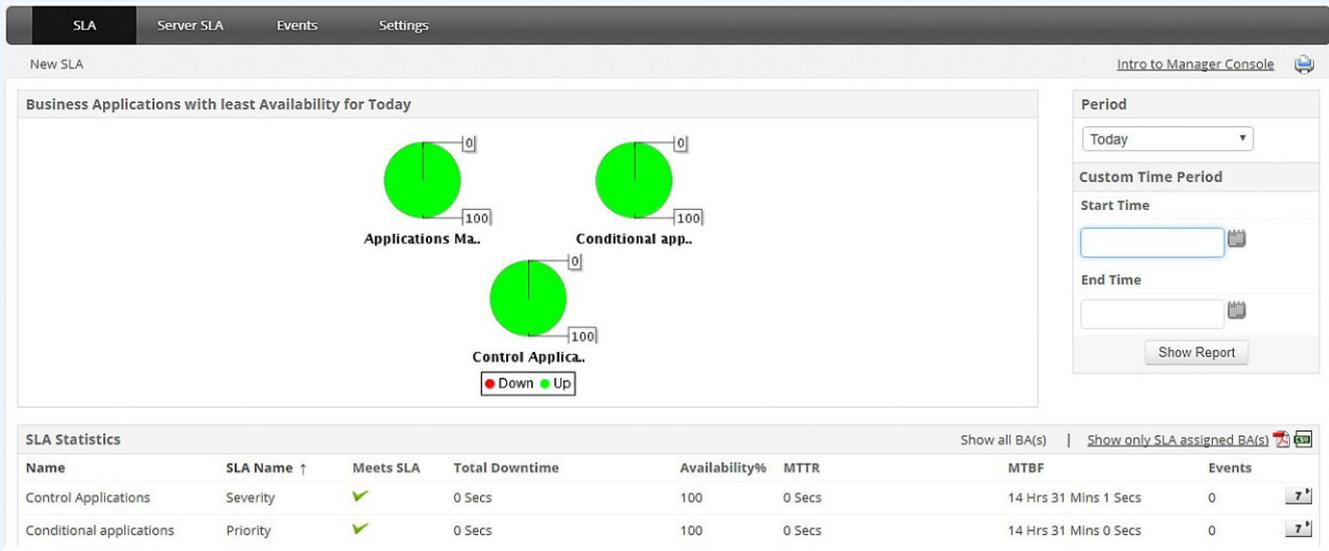
- OpManager Plus and Applications Manager together can monitor all the service components like network devices, servers, virtualization, applications, data-



Availability and performance report of a service



Memory utilization of top 10 devices



SLA dashboard

8.3.4 Supplier management

Addressed process requirement(s):

- Develop, agree on, and maintain a documented agreement with the external and internal suppliers.
- Monitor the performance of the supplier including service targets at planned intervals.

ManageEngine product that can help in implementing these processes:

ServiceDesk Plus

- The agreements with external and internal suppliers along with sub-contract, service components, vendor, cost, expiration, etc. can be maintained and tracked using the Contracts module.

The screenshot displays the 'Edit Contract' interface. At the top, the title is 'Edit Contract'. The form is divided into several sections:

- Contract Details:** Includes fields for Name (Component Maintenance Contract), Parent Contract (Choose Parent), Contract ID (C-003), and Description.
- Vendor and Support:** Includes Type (Maintenance), Vendor (dell), Renewed Contract (checkbox), and Support (text area).
- Assets:** A section titled 'Select assets for this contract.' with 'Add Assets' and 'Remove' buttons. A list shows 'Dell Precision' and 'Dell Latitude'.
- Active Period:** Fields for 'From' (2020-06-23) and 'To' (2020-06-30).
- Maintenance Cost:** A field for 'Maintenance Cost (\$)' with the value 0.00.
- Notification Rules:** A checkbox for 'Enable Notification' which is checked.

Contracts Module to maintain agreements

- Operational-level agreements (OLA's) agreed on with internal suppliers can be assigned to incidents and service requests and their performance can be measured against the agreement.

Operational level agreement(OLA)

i OLA time is applied individually to each selected group.

Group Name:

OLA Time:

Days	1 Hour	Minutes
0		
1		
2		
3		
4		
5		

Description:

OLA for Internal Suppliers

8.4 Supply and demand

8.4.1 Budgeting and accounting for services

Addressed process requirement(s):

- Costs shall be budgeted for effective financial control and decision making for services.
- Monitor and report on actual costs, review the financial forecasts, and manage costs at planned intervals.

ManageEngine product(s) that can help in implementing these process- ServiceDesk Plus and Analytics Plus

- Budget the recurring cost using the software License Agreements and Contracts modules.

The screenshot shows a web-based form for creating a software license agreement. It is divided into several sections:

- Agreement Details:** Fields for Manufacturer (Microsoft Corporation), Agreement Number, Authorization Number, Description (Max 250 characters), Active From, Expiry Date, Vendor Name (Choose Vendor), and Terms.
- Purchase & Invoice Details:** Fields for PO #, PO Name, Purchase Date, Invoice Number, Invoice Date, and Total Cost (\$).
- Purchased Software Licenses:** A table with columns for License Name, Software, License Type, License Option, Installation(s) Allowed, License Key, and Cost (\$). A message states "No software licenses available in this view." Buttons for "Add new licenses and associate" and "Associate Existing Licenses" are present.
- Agreement Expiry Notification:** A section to select users to be notified before agreement expiry, with "User List" and "Notified User List" fields and navigation arrows.

Software license agreement

- Record and report on the actual costs and budget based on depreciation and spending. ServiceDesk Plus, when integrated with Analytics Plus, provides more visibility on the budget.

CI Info | Hardware | Software | System | Relationships | History | Requests | Contracts | **Financials**

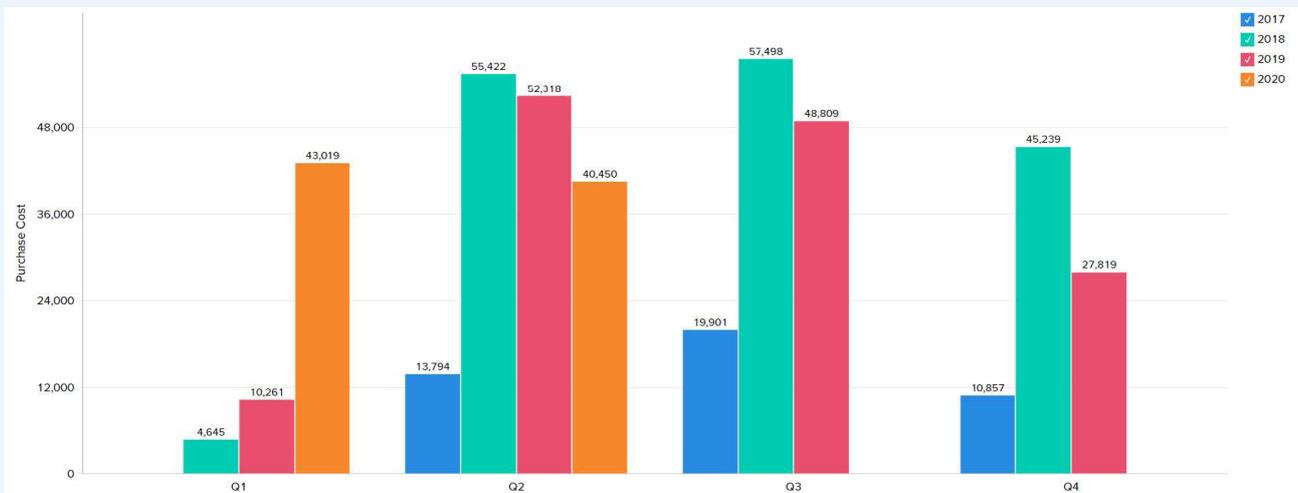
Costs + Add Cost

Purchase Cost (\$)	-	Current Book Value (\$)	-
Operational Cost (\$)	-	Total Cost of Ownership (\$)	-

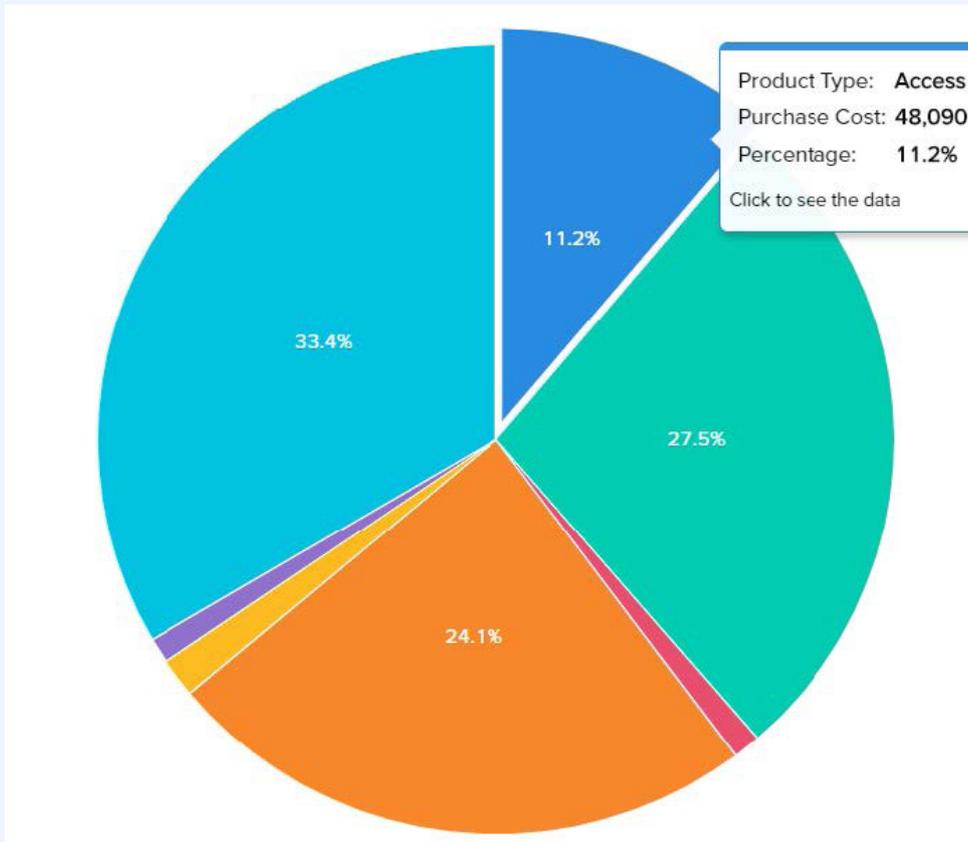
Depreciation Details + Configure Depreciation

Purchase Cost(\$)	-	Acquisition Date	-
-------------------	---	------------------	---

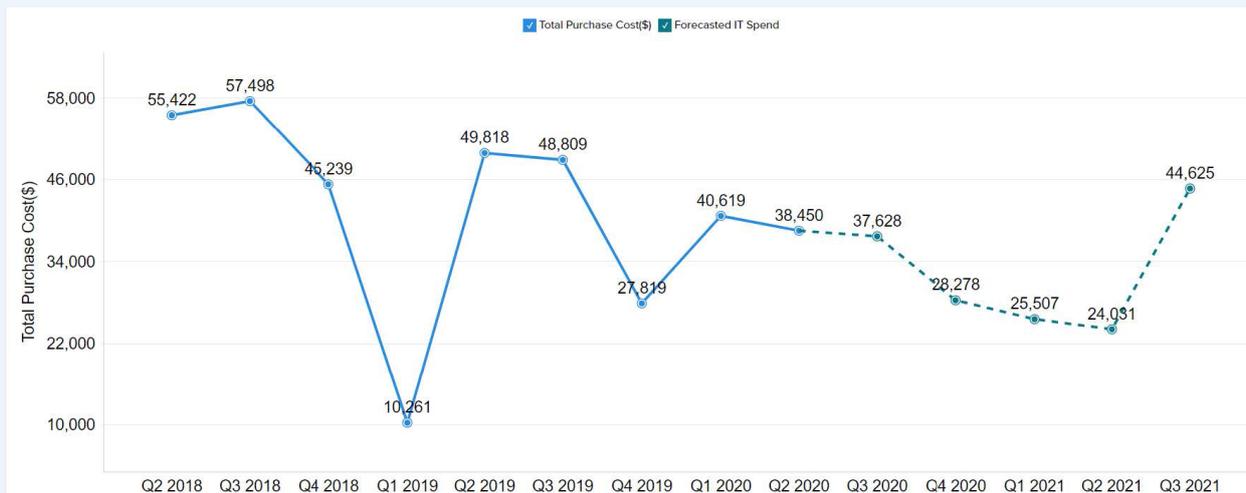
Asset financial and depreciation details



Year-over-year (YOY) comparison of IT spending based on purchase costs



IT spending



IT spending forecast

8.4.2 Demand management

Addressed process requirement(s):

- Monitor and report on the demand and consumption of services at planned intervals.

ManageEngine product(s) that can help in implementing these pro-ServiceDesk Plus and Analytics Plus

- Analytics Plus, when integrated with ServiceDesk Plus, helps you determine the demand based on the consumption of services through service requests.



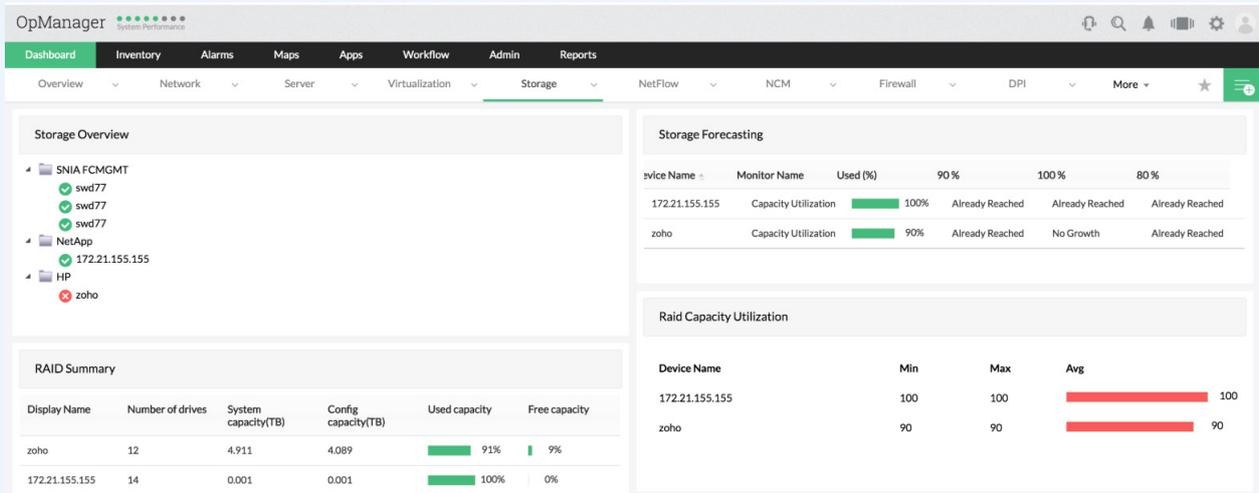
Top 10 frequently requested service

OpManager Plus and Applications Man-

- The reporting module forecasts the demand based on the consumption of service components.



Forecast report on disk utilization



Storage capacity forecasting

8.4.3 Capacity management

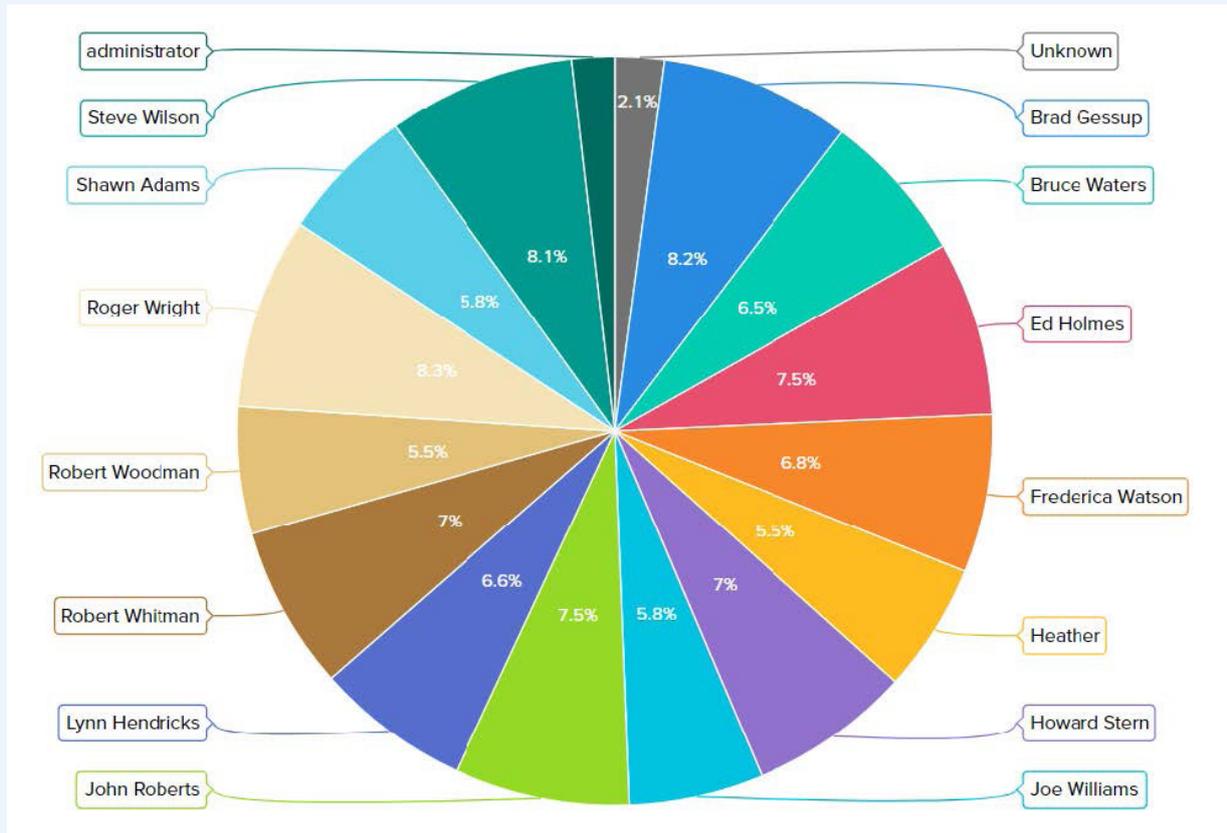
Addressed process requirement(s):

- Monitor capacity utilized, and analyze capacity and performance data related to human, technical, informational, and financial resources to identify opportunities

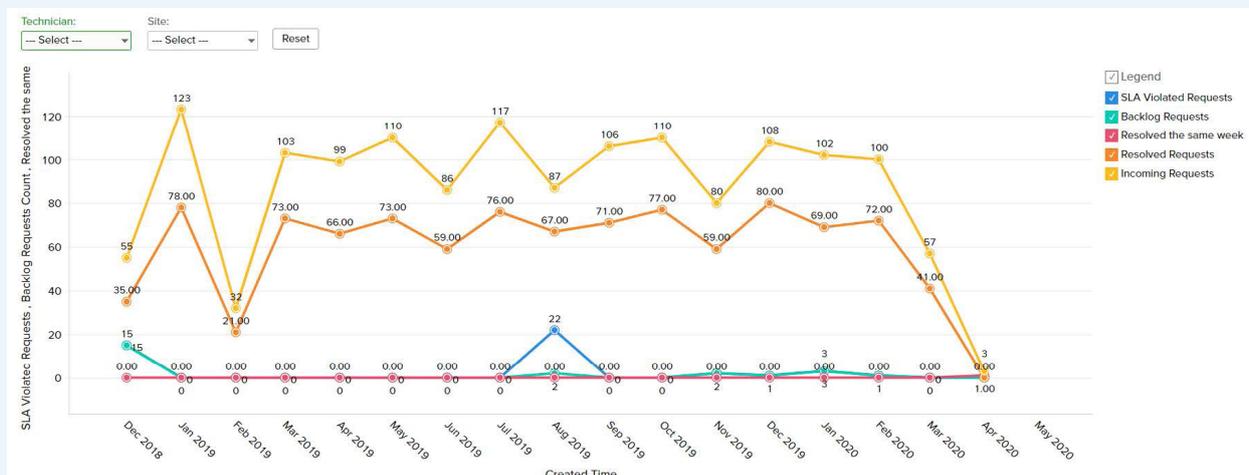
ManageEngine product(s) that can help in implementing this process:

ServiceDesk Plus and Analytics Plus

- Analyze capacity and performance related to IT human resources based on handled incidents, service requests, problems, changes, releases, projects, etc.



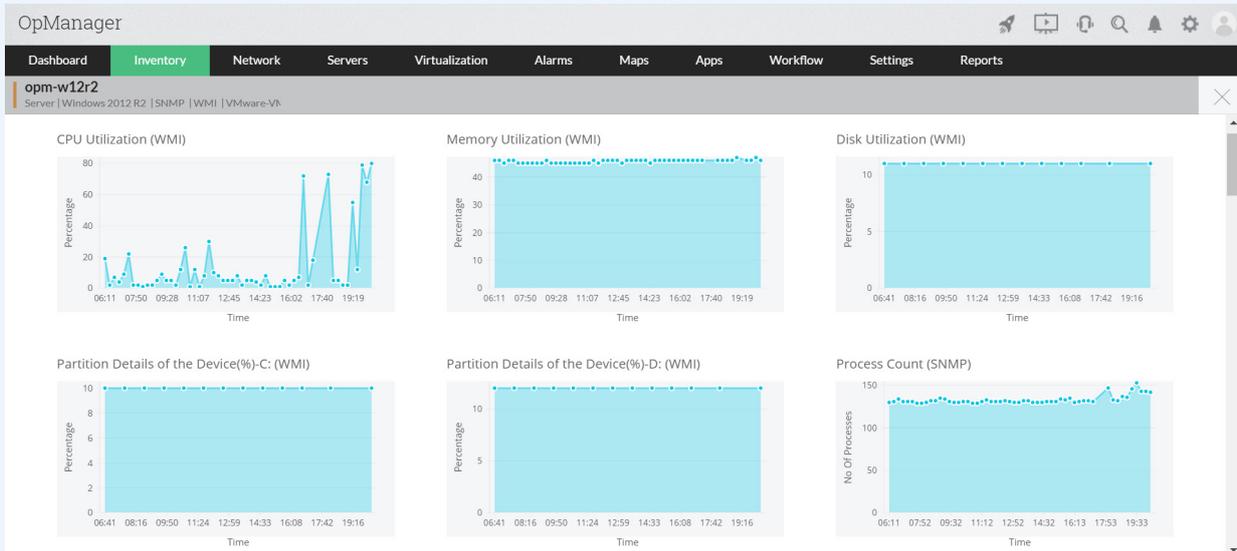
Technician load: Open requests



Incoming, resolved, backlogged, and same-week

OpManager Plus and Applications Man-

- Monitor and analyze capacity and performance of service components including servers, applications, network, bandwidth, and storage.



Server performance monitoring

Capacity Planning Show All | Show Oversized Servers Last One Year

Monitor	Oversized	CPU Utilization	Memory Utilization	Disk Utilization	Notes
opm-w2k12r2-2	Yes	100% of Time CPU Utilization <50 (%) No. of Processors 1, Speed 3,193 MHz	0% of Time Memory Utilization <50 (%) Total Physical Memory 16,284 MB	100% of Time Disk Utilization <50 (%)	
Windows Server	Yes	100% of Time CPU Utilization <50 (%) No. of Processors 2, Speed 2,400 MHz	0% of Time Memory Utilization <50 (%) Total Physical Memory 65,525 MB	100% of Time Disk Utilization <50 (%) Click here to view partition. Total Disk Size: 139,623 MB	

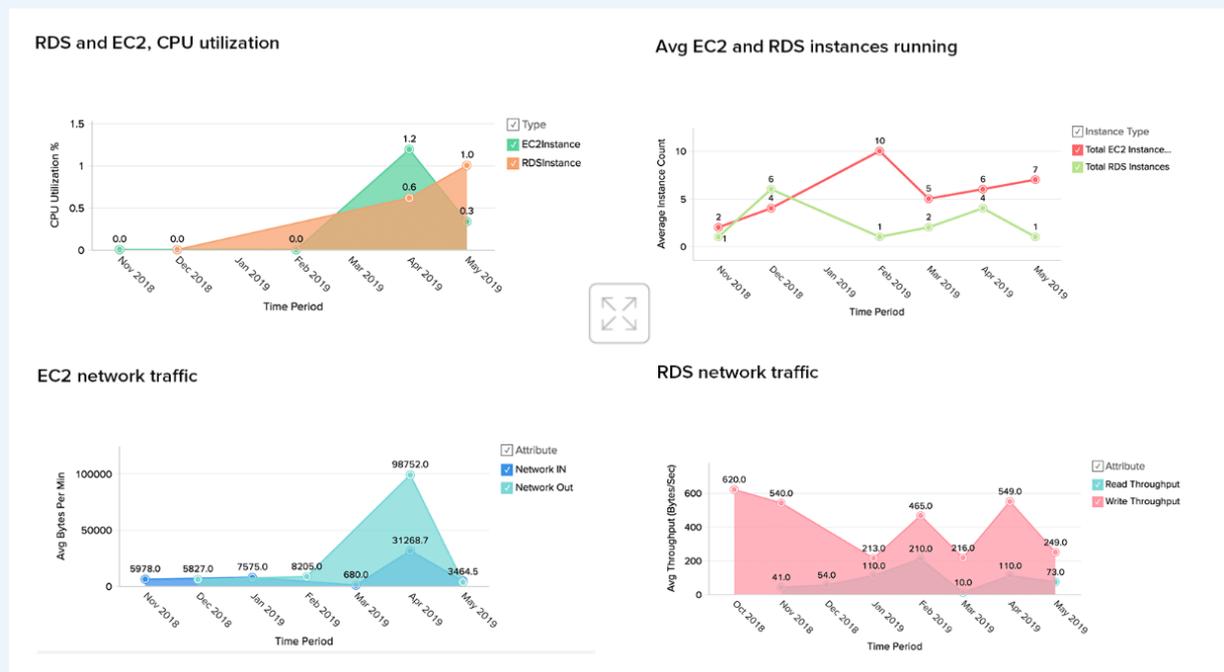
Report on over-sized servers

Analytics Plus

Advanced analytics on a wide variety of data points including capacity and performance can be generated by integrating ManageEngine applications and any other applications that use local and cloud databases like MS SQL, Oracle, MySQL, Azure SQL, etc. with Analytics Plus.



Analytics Plus possible integrations



Applications Manager integration: AWS performance report

8.5 Service design, build, and transition

8.5.1 Change management

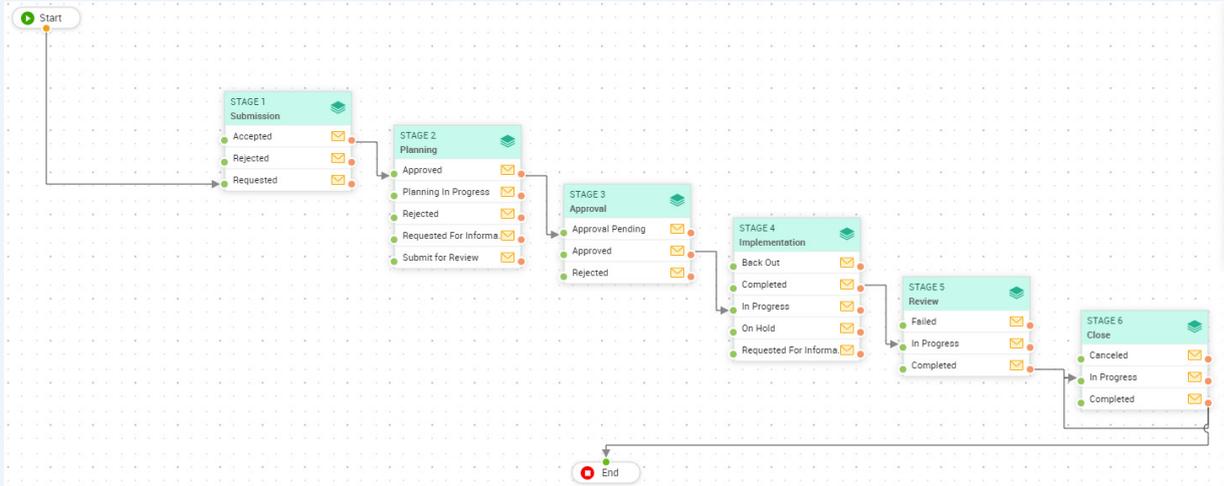
Addressed process requirement(s):

- Requests for changes, including proposals to add, remove, or transfer services, shall be recorded and classified.
- Assessing, approving, scheduling, and reviewing of new or changed services shall be managed through the change management activities.
- Interested parties shall make decisions on the approval and on the priority.
- Approved changes shall be prepared, verified, and tested when possible.
- Communicate deployment dates and other deployment details for approved changes to interested parties.
- The activities to reverse or remedy an unsuccessful change shall be planned and tested when possible. Unsuccessful changes shall be investigated and agreed actions shall be taken.
- At planned intervals, request for change records shall be analyzed to detect trends and effectiveness and to identify opportunities for improvement.

ManageEngine products that can help in implementing these processes:

ServiceDesk Plus

- **The Change management module** allows users to submit requests for changes with different workflows for different types of changes like standard, normal, and emergency.



Configurable change workflow

Change		Release	
Active Workflow			
<input type="button" value="+ New Workflow"/> <input type="button" value="Copy Workflow"/> <input type="button" value="Q"/> <input type="button" value="🗑️"/> <input type="button" value="10"/> <input type="button" value="1 - 4 of 4"/> <input type="button" value="⏪"/> <input type="button" value="⏩"/>			
<input type="checkbox"/>		Workflow Name	Type
<input type="checkbox"/>	☰	Common (Default) This defines the sample and default workflow model	General
<input type="checkbox"/>	☰	Emergency Change This defines the emergency workflow model	Emergency
<input type="checkbox"/>	☰	Major Change No description available	General
<input type="checkbox"/>	☰	Standard Change	General

Multiple change workflows

- The template/workflow used to submit the request is configurable to have its fields, stages, and statuses. By default, the request can go through various stages like submission, planning, approval, implementation, review, and closure with different statuses allowing you to track the progress of the request. The workflow also lets you to return to the previous stages, as needed.

The screenshot shows a detailed form for creating a Request for Change (RFC). The form is organized into several sections:

- Change Details:** Includes fields for Change Requester, Change Type, Category, Criticality (set to 'ok'), Subcategory, Item, Stage (Submission), Status (Requested), Status Comments, Scheduled Start, Services Affected, Title, Reason For Change, and Description (with a rich text editor).
- Change Roles:** Includes fields for Site, Group, Change Owner, Estimate Cost \$, Change Manager, Impact, Urgency, Priority, Risk, Scheduled End, and Assets Involved.
- Field & Form Rules:** A sidebar on the left with options like 'Add New Field', 'Available Fields', 'Retrospective', and 'Review Schedule'.

Configurable RFC template

WAN - Port - Reconfigure
 Requested by: **Shawn Adams**
 Scheduled End Time: 15/06/2020 12:27 PM
 Planning In Progress

Approve Reject
 Status: Planning In Progress

Submission Planning Approval Implementation(0/0) Review Close Conversations History

Analysis Problems (0) Requests (0)

Impact
 No description found. [Add](#) | [Attach a file](#)

Roll Out Plan
 No description found. [Add](#) | [Attach a file](#)

Attachments
 ❌ AllHardware.doc (16B by Demo on 16/11/2016 11:31 AM)

Backout Plan
 No description found. [Add](#) | [Attach a file](#)

Attachments
 ❌ AllHardwareBackout.doc (12B by Demo on 16/11/2016 11:31 AM)

Check List [Edit](#) | [Attach a file](#) (Entered by Demo on 03/06/2022 09:36 AM)
 Obtain IP address settings automatically via DHCP
 Static IP
 PPPoE
 ISP line rate
 Jumbo frames

Downtime
 No downtime found. [Add](#)

Change planning

- Approval can involve both a change manager and the Change Advisory Board's (CAB's) approval along with the third party's approval. Once the change is approved,

WAN - Port - Reconfigure
 Requested by: **Shawn Adams**
 Scheduled End Time: 15/06/2020 12:27 PM
 Planning In Progress

Approve Reject
 Status: Planning In Progress

Submission Planning Approval Implementation(0/0) Review Close Conversations History

CAB Recommendation

Level Actions - Level 1 : Level 1 - Yet to Progress

Send for Approval Add Approvals

Status	Approvers	Sent On	Acted On	Comments
To Be Sent	Demo	-	-	-
To Be Sent	Mohammed Iqbal	-	-	-

Change approval

- Unsuccessful change requests will follow the configured workflow, like returning to previous stages or closing the change record.

In Progress

Submission | Planning | Approval | Implementation(0/1) | **Review** | Close | Conversations | History

Review

B I U abc F 10 [Color] [Stroke] [Align] [List] [Table] [Image] [Link] [Quote] [Undo] [Redo] [Help] [More]

Change Unsuccessful due to backup issues. Replan the change.

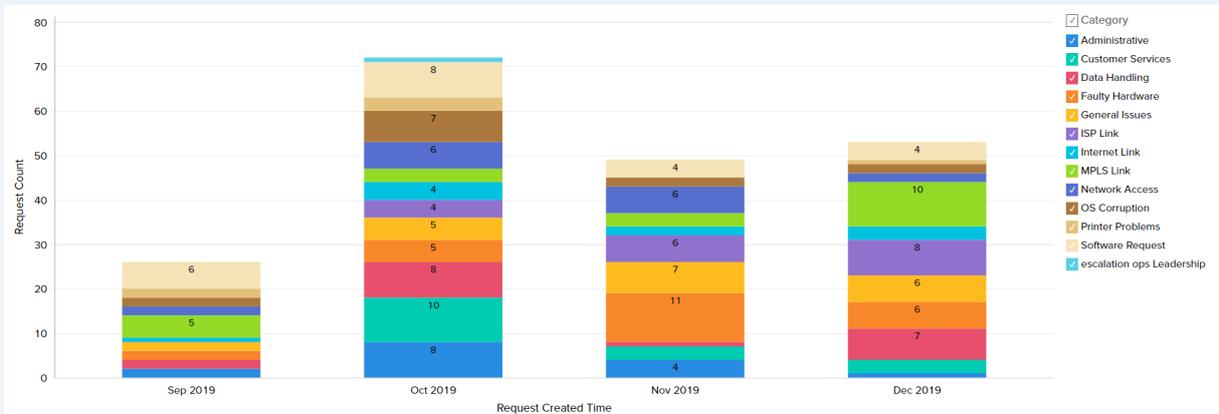
Next Review Schedule: [Date] [00] Hours [00] Minutes

Save Cancel

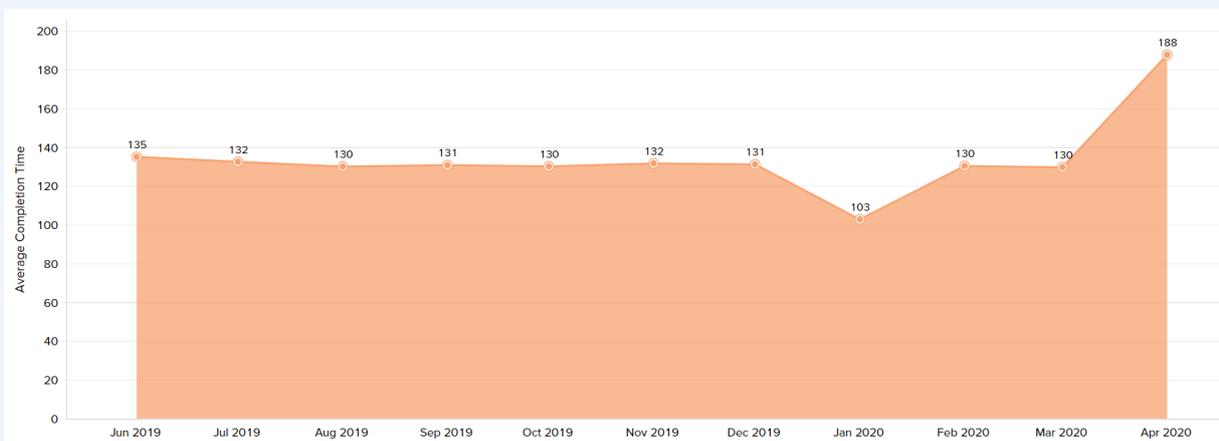
Change review

Analytics Plus

- Analytics Plus, when integrated with ServiceDesk Plus, provides out-of-the box reports on change management, which helps in analyzing the trend's effectiveness.



Trend requests for analyzing changes



Average change completion time (in days)

Addressed process requirement(s):

- New services or changes to services with potential to have major impact, removal of a service, and transfer of an existing service from/to organization/customer/third party shall follow service design and transition.
- Planning shall contain reference to authorities and responsibilities, activities with timescales, resources information, dependencies, testing, acceptance criteria, affected CI's, and date of effect.
- Design shall include authorities and responsibilities, resources information, required training, SLA/contract changes, impact on other services, and updates to the service catalog.
- Release and deployment management shall be used to deploy the approved new or changed services into the live environment.
- After this, the interested parties shall be communicated with achievements against expected outcomes.

ManageEngine product(s) that can help in implementing these processes:

ServiceDesk Plus

- The change management module helps you create a separate template/workflow to handle major changes that are under the scope of new or changed services.
- The template and the change request allows you to record and maintain all the required details of the planning and design phases including authorities, affected CI's, activities, resources information, impact, etc.
- Once the change request is approved, the deployment can either go through the implementation stage of a change request which interfaces with tasks, projects and release modules.

WAN - Port - Reconfigure
 Requested by: **Shawn Adams**
 Scheduled End Time: 15/06/2020 12:27 PM

Planning In Progress

Submission | Planning | Approval | **Implementation(0/1)** | Review | Close

Conversations | History

Projects initiated by this Change

Create New | Associate | Dissociate

Title	Status	Priority	Owner	Schedule Start	Schedule End	Projected On	Tasks	Milestones
WAN - Port - Reconfigure	Open	-	-	02/06/2022 12:00 AM	16/06/2022 11:59 PM	16/06/2022 11:59 PM	0 / 0	0 / 0

Releases initiated by this change

No associated release. [Create New Release](#) or [Associate Existing Release](#)

Task Details

All Tasks | Actions | Add New | Templates | Dependencies | Trigger | 1 - 1 of 1 | Show 100 per page

Title	Status	Priority	Owner	Scheduled Start Time	Scheduled End Time	% of completion	Task Order
-------	--------	----------	-------	----------------------	--------------------	-----------------	------------

Implementation: Projects and tasks

Edit | Print | Actions | Workflow | Release

Firewall policy changes
 Requested by **Catrin Folkesson** on 03/11/2021 11:50 AM

Stages: Submission | **Planning** | Development | Testing | UAT | Deployment | Training | Review | Closure

Roles | Associations | **Tasks (1/2)** | Reminders | Work Logs | Approval Summary | Conversations | History

Planning

Details | Downtime | Tasks | Notes | Approvals | Status Comments

Impact Details | Updated By **Demo** 29/06/2022 01:18 PM

May create security holes that allow malicious traffic to sneak into a private network

Save | Cancel

ID: **RL-3**
 Status: **In Progress / Planning**
 Workflow: **General Release Workflow**
 Template: **General Template**
 Release Engineer: **Demo**
 Release Manager: **Demo**
 Scheduled End: **02/07/2022 01:19 PM**

Associations
 Associated Changes: **3**
 Associated Projects: **1**

Release management

- The achievements against the expected outcomes can be communicated using the notification from the change request itself.

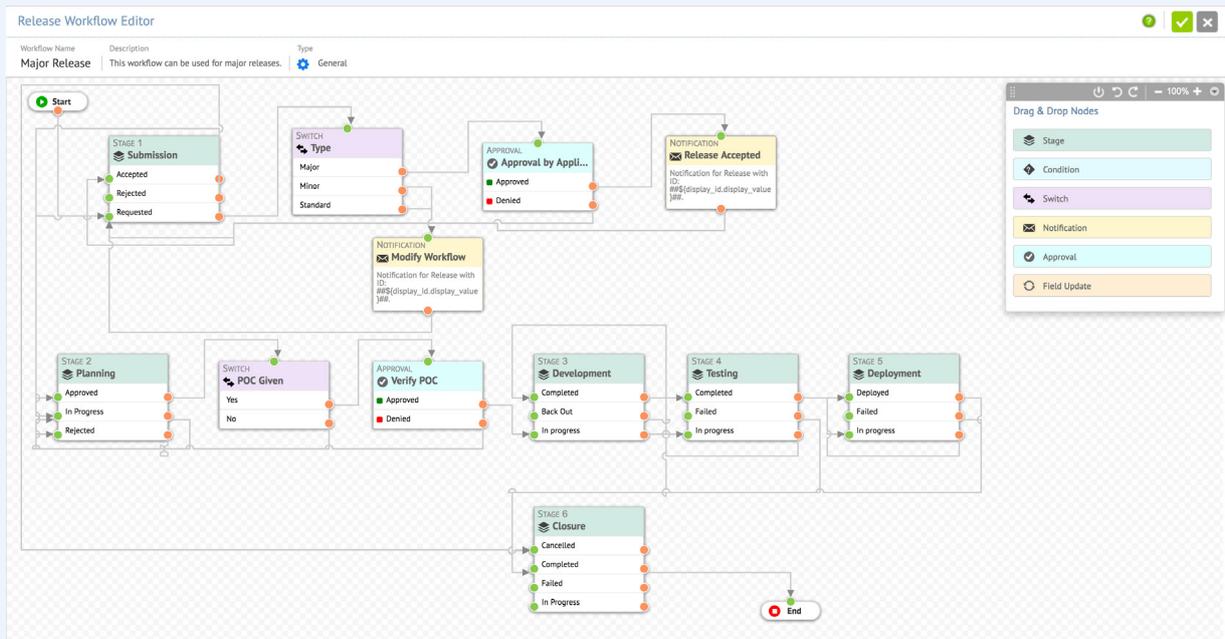
Addressed process requirement(s):

- The types of release, including emergency release, their frequency, and how they are to be managed, shall be defined.
- The deployment of new or changed services and service components into the live environment shall be planned and coordinated with change management and include references to the related requests for change, known errors or problems, the deployment dates, deliverables, and methods of deployment.
- The release shall be approved before deployment and verified against documented acceptance criteria.
- Before deployment of a release into the live environment, a baseline of the affected CIs shall be taken.
- The success or failure of releases shall be monitored and analyzed, including

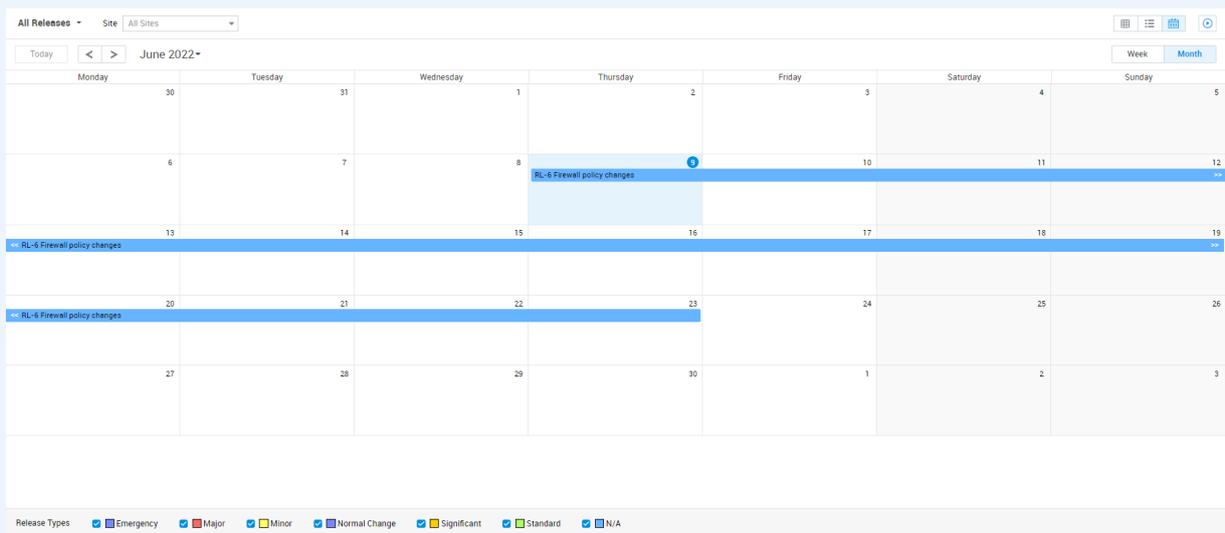
ManageEngine products that can help in implementing these processes:

ServiceDesk Plus

- The release module available in the cloud version supports different templates/workflows for different types of releases including emergency releases.
- The release request by default can go through different stages like submission, planning, development, testing, user acceptance testing (UAT), deployment, training, review, and closure. Each stage will mention the status to help track the progress. New stages/statuses can be configured as required. The workflow



Release workflow



Release calendar

- The release request will contain reference to change, problem, known errors, and other deliverables.

New Release Choose Template: General Template Choose Workflow: General Release Workflow

Associated Change *

Release Requester Site

Type Group

Impact Release Engineer

Urgency Release Manager

Stage * Priority

Status * Risk

Comment *

CSI Section

Category Sub Category

Item

Scheduled Start Scheduled End

Services Affected

Assets Involved

CIs Involved

Reason for Change

New release template: Change association

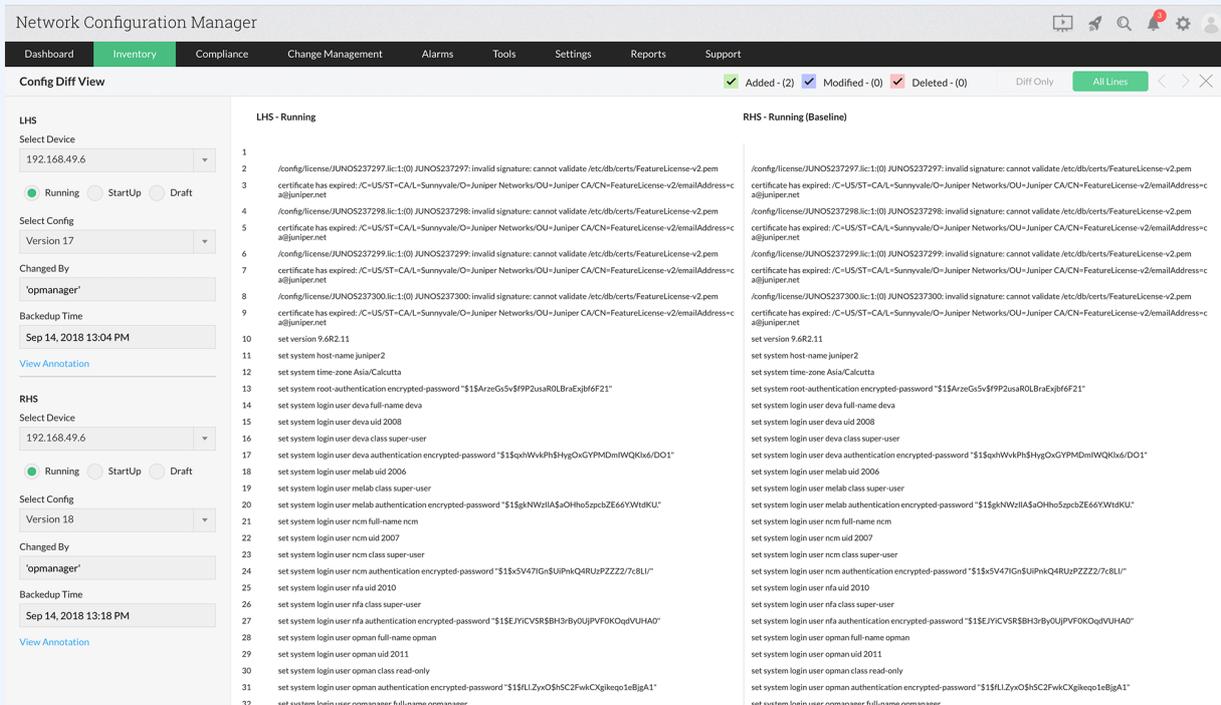
- Reporting module helps you to analyze the effectiveness of the release to identify opportunities for improvement.
- For the on-premises version, the same can be handled using a combination of the change and project modules.

Details			
Change that initiated this Project Dissociate			
Title	Windows Servers OS Upgrade	Change Owner	N/A
Stage	Submission	Status	Accepted
Priority	High	Scheduled End Time	27/11/2016 12:34 PM
Project Details			
Hi,			
We are planning to upgrade the OS of all our servers from Windows 2008 R2 to 2012 R2. The change is being planned with the following objectives in mind:			
<ul style="list-style-type: none"> • To leverage the security advantages of Windows 2012 R2 such as dynamic IP restrictions and access controls and new authorization and audit engine for dynamic access controls. • Provision to manage the entire network as a single server, advanced automation of routine tasks with Windows PowerShell. • Server virtualization 			
The expected benefits out of this change include:			
Migration to Windows Server 2012 allows us to deliver modern application services while virtualizing on our own terms, and automate IT operations to drive quality and efficiency. Specific benefits include:			
Project Code	-	Status	Open

Project management: Change association

OpManager Plus

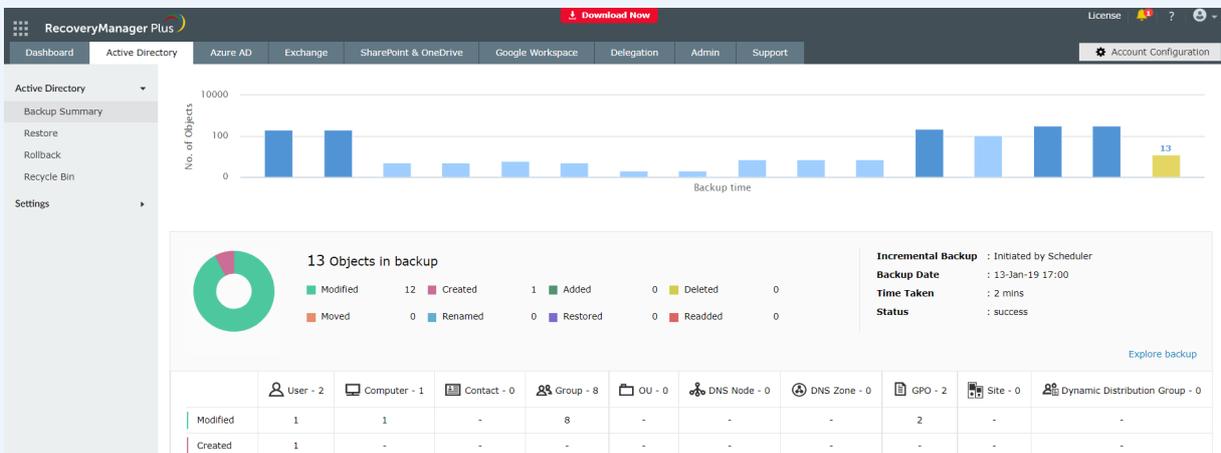
- OpManager’s Network Configuration Manager component can take a back-up of the network device configurations as a baseline before deployment of a release, compare the changes, and rollback changes as required.



Compare configurations

AD360

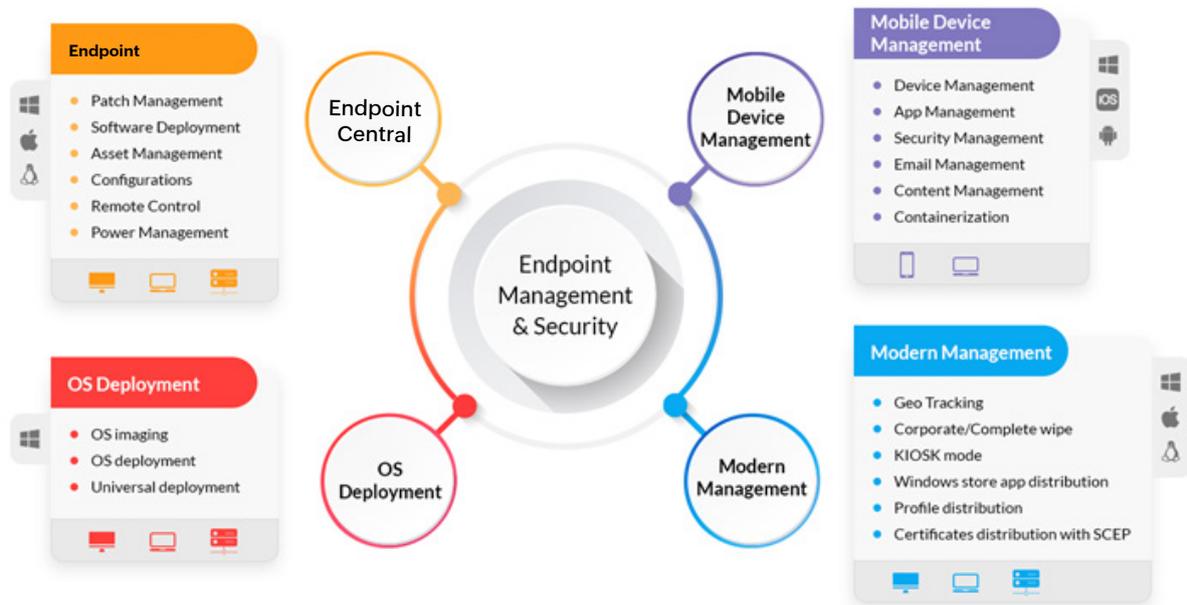
- The Recovery Manager Plus component of AD360 can backup AD objects, Exchange mailboxes, OneDrive for Business, and SharePoint Online sites as baselines, and offers simple and granular restoration options.



AD, Exchange, Sharepoint, and OneDrive backup and restore

Endpoint Central

- The OS Deployment module of Endpoint Central can take an image of the OS before the deployment of a release. Endpoint Central also helps you to deploy the releases pertaining to software deployment, patch management, computer configurations, etc.



Endpoint Central for endpoint releases

8.6 Resolution and fulfillment

8.6.1 Incident management

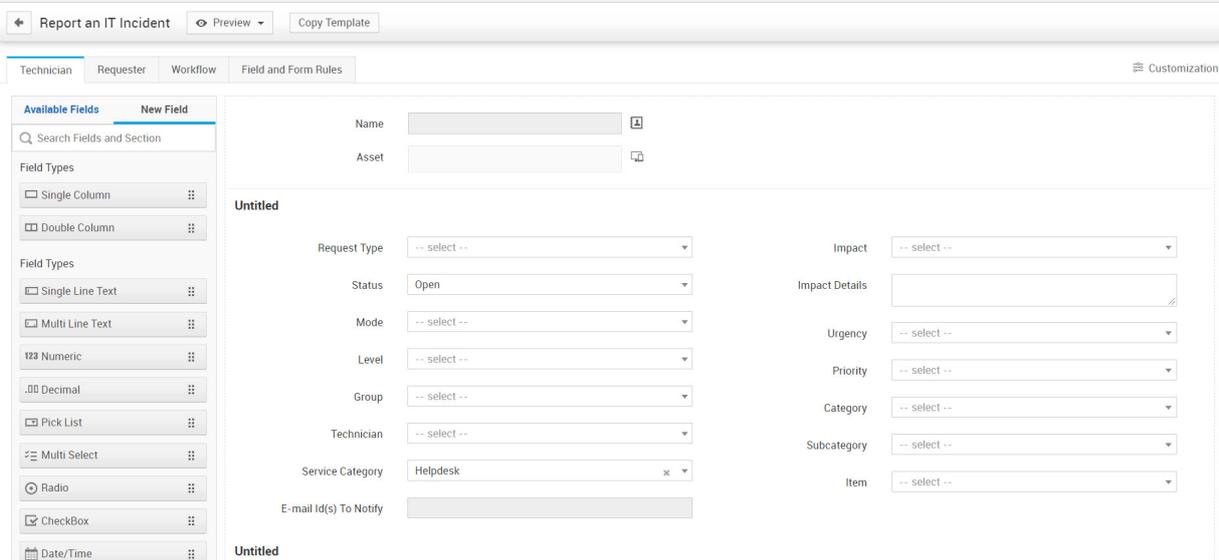
Addressed process requirement(s):

- Incidents shall be recorded, classified, prioritized based on impact and urgency, escalated if needed, updated with actions, resolved, and closed.
- Major incidents shall be classified and managed through a documented procedure. The major incidents shall be reported to top management and reviewed post resolution for opportunities for improvement.

ManageEngine product that can help in implementing these processes:

ServiceDesk Plus and Analytics Plus

- The Incident management module helps you to record incidents using customizable templates, prioritize based on impact and urgency matrix, escalate based on response and resolution time, update actions taken, resolve, and close the incidents.



Customizable incident template

Any request matching the above rules should be responded within: 0 Days 0 Hours 30 Minutes **Response Time : 0 Hrs 30 Mins**

Any request matching the above rules should be resolved within : 0 Days 2 Hours 0 Minutes **Resolution Time : 2 Hrs 0 Mins**

Should be resolved/responded irrespective of operational hours. : [Operational Hours per Day for this site : 9 Hrs 0 Mins]

Should be resolved/responded irrespective of Holidays.

Should be resolved/responded irrespective of Weekends.

If response time is elapsed then escalate:

Enable Level 1 Escalation

If resolution time is elapsed then escalate:

Enable Level 1 Escalation

Enable Level 2 Escalation

Enable Level 3 Escalation

Enable Level 4 Escalation

Operational level agreement(OLA)

i OLA time is applied individually to each selected group.

Group Name	OLA Time	Description
<input type="text"/>	--Select--	<input type="text"/>

Response, resolution, and escalation

#1 Unable to print

by Heather Graham on Apr 7, 2020 04:30 PM | **DueBy : Apr 7, 2020 05:30 PM**

Details Resolution Tasks Checklist Work Logs Time Analysis History

Resolution Solutions Tried Solutions

B *I* U **F** 10 X_2 \bar{x}^2

Printer re-installed

Attachments : Attach file

Update request status to **Resolved**

Update actions, and resolve/close incidents

- If an incident is categorized as major incidents, it can be handled with different priority and processes, updating top management with the progress.

Rule name: Hardware Dispatch | Description: Dispatch requests to Hardware group. Requests might need analysis to further classify as hardware or network problem

Execute on actions: Created x

Execute during: Any Time Within Operational Hours Outside Operational Hours

Cascade Execution: Execute next rule Skip remaining rules in this group Skip remaining rules across all groups

Criteria

- Category is Desktop Hardware x
- AND CC is network-support
- AND Subject contains System Crashed

Actions

When a request arrives: Execute custom actions Abort process execution

Field Update

Group: Hardware Problems

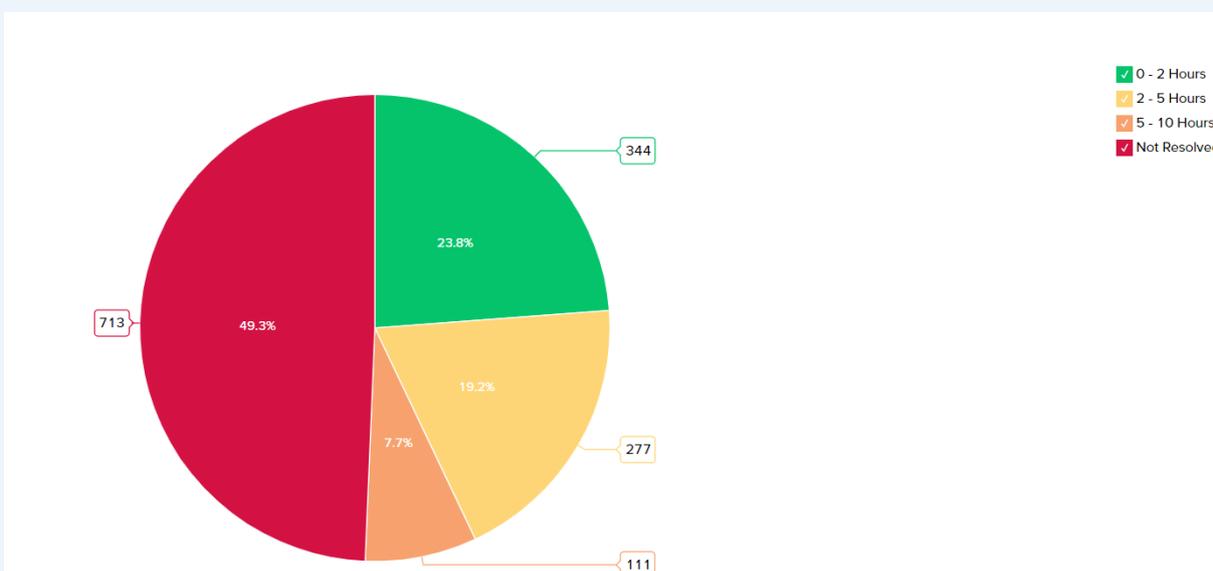
Update | Cancel

Business rules

- Analytics Plus integration helps you to analyze the records for opportunities for improvement.



Closed requests: Trend report



Average time to resolve

8.6.2 Service request management

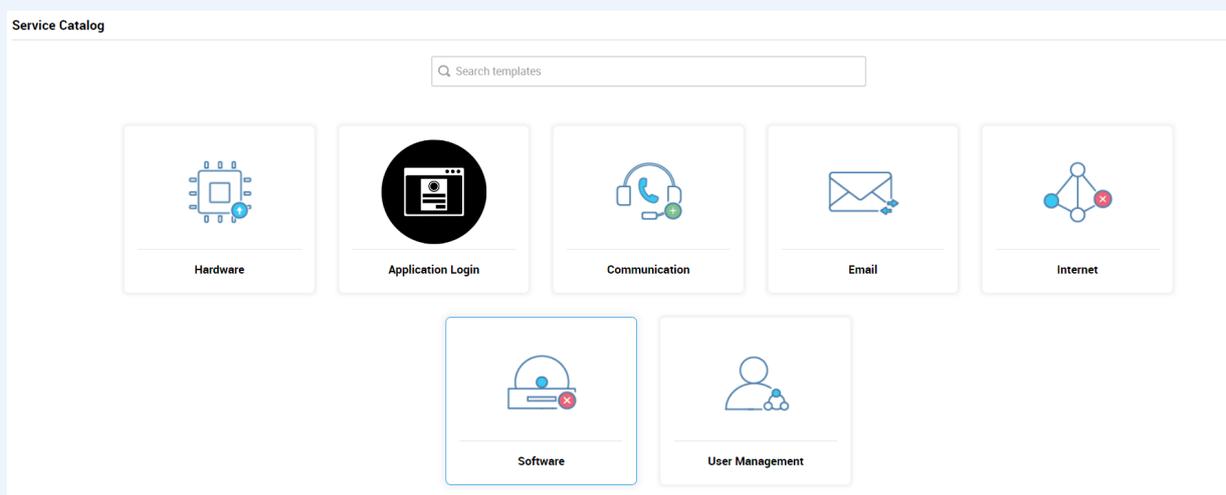
Addressed process requirement(s):

- Service requests shall be recorded, classified, prioritized, fulfilled, updated with actions taken, and closed.

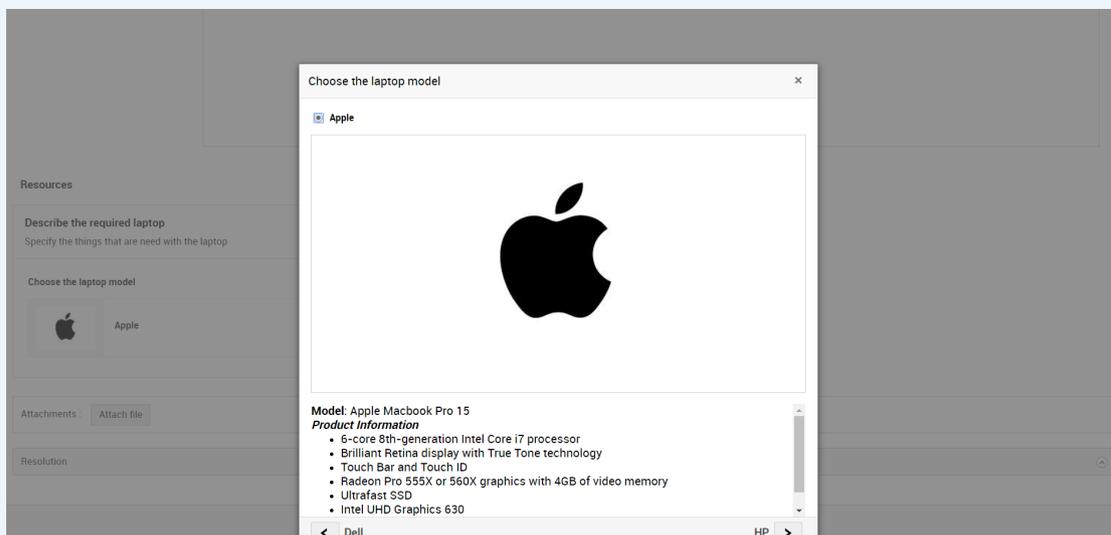
ManageEngine product that can help in implementing these processes:

ServiceDesk Plus

- The Service Catalog module helps you to create different service request templates under different categories, allowing users to choose the required service requests. Each template can have its own workflow process for approval, assignment, SLA, prioritization, and required fields to automate the flow of fulfillment.



Service request templates



Choose a laptop to find details

Describe the required laptop  

Specify the things that are need with the laptop

Choose the laptop model



Apple ▼

Cost Details

 Enter additional information.

Service Cost

Capture provisioning costs

Add Resource Associate Resource Sections  

Select existing questions + ▼

Q Type and Press

- Plain text
- Check box
- Radio
- Drop down

Choose the deskto
Drop down

Choose the operating system
Drop down

Choose the additional hardware required
Check box

Choose the softwares to be installed
Check box

Choose the laptop model
Drop down

Choose the account required for the new em...
Check box

Choose the devices required
Check box

What model of Computer do you want ?
Drop down

Desktop
Check box

Resource Sections

Name	Description	Columns
.		

No Questions added.

Save Save and Add New Cancel

Resource form for customization

Technician Requester **Workflow** Field and Form Rules

Approval Details

Select Approver

Stage One

Stage Two

Stage Three

Stage Four

Stage Five -

Approval Configurations

By default, when a request is approved, its approval status is updated as **Approved**. If one approver rejects it, the status remains in **Pending Approval**, until all approvers reject the request. Then, the approval status is updated to **Denied**.

- All approvers must approve the Service Request.
- Apply first approval action.

- Send approval notification automatically when a Service Request is raised.
- Assign technician only after Service Request approval.

[Click here to configure outgoing mail server](#)

Save Cancel

SLA (1)

Add New SLA

High SR SLA 🕒 1 Day 👤 Template Users

Approval workflow and SLA

Technician	Requester	Workflow	Field and Form Rules
------------	-----------	----------	-----------------------------

On Form Load	On Field Change	On Form Submit
---------------------	-----------------	----------------

With this option, you can easily add some logic rules to your template, to handle the form flow and validation execution and so on.. Customize the flow of your form using a set of rules.

- 
Add logic Conditions to your fields
 Using Field Rules, you can show form fields based on user input
- 
Automate on different states
 Update a form field value and so on...
- 
Validate & extend the work flow through custom scripts
 You can write your own custom script specific to your business requirements of the form flow.

[Create New Rule](#)

Field and form rules

8.6.3 Problem management

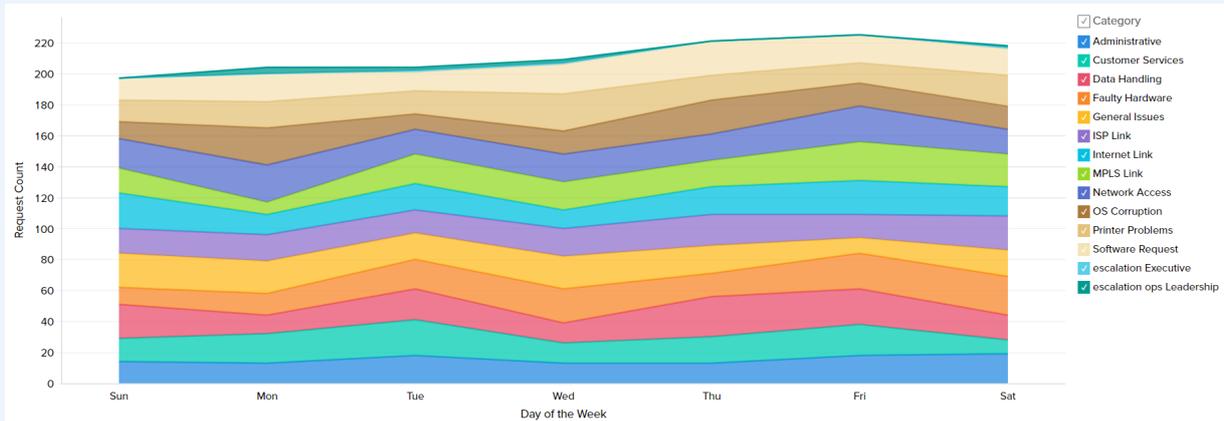
Addressed process requirement(s):

- Analyze data and trends on incidents to identify problems. Undertake root cause analysis and determine potential actions to prevent the occurrence or recurrence of incidents.
- Problems shall be recorded, classified, prioritized, escalated if needed, updated with actions, resolved if possible, and closed.
- Changes needed for problem resolution shall follow change management. Up-to-date information on known errors and problem resolutions shall be made available.
- The effectiveness of problem resolution shall be monitored, reviewed and reported on at planned intervals.

ManageEngine product that can help in implementing these processes:

ServiceDesk Plus and Analytics Plus

- The Reporting/Advanced Analytics module helps you to analyze data and trends on incidents to identify problems.



Weekly ticket inflow by category

- A problem record can be recorded, classified, prioritized, updated with actions, and resolved/closed. A problem record can be created directly after analyzing

The screenshot shows a ticketing system interface for a problem record titled "#2 Application is Slow". The record is created by Jennifer Doe on Apr 8, 2020, 03:16 PM, with a due date of Apr 8, 2020, 04:16 PM. The status is "Open", priority is "High", and the technician is "administrator". The group is "Not Assigned". The description reads: "Dear Team, During recent days, the application is very slow and could not perform any of my duties. Kindly look into this urgently, as this issue is for all my department staff. Regards, Jen". The right-hand sidebar shows options to "Associate Problem", "Associate Change", and "Associate Project". The "Associate Problem" option is highlighted with a red box.

Incident to problem association

- The problem record maintains the known errors, root cause, impact, work-around, and solution.

The screenshot shows a problem analysis page for "Application Performance Degradation". The problem is created by Jennifer Doe on Apr 8, 2020, 03:14 PM, with a due date of Apr 10, 2020, 03:15 PM. The status is "Open", priority is "High", and known error is "No". The impact is "Users are unable to use the application and are creating backlogs." The root cause is "The application server was updated recently updated with a new set of patches that updated the .Net version and the same is incompatible with the application." The symptoms are "Log in to the application will work. Post login, users will be able to see all the functionalities. But, if they try accessing it, it will slow down the entire application with no further progress."

Problem analysis

- The problem record can be associated with a change record if a resolution for a problem is found and can follow the change management process.

Problem ID : 1 Edit Print Add New Actions Solution

Application Performance Degradation
By **Jennifer Doe** on Apr 8, 2020 03:14 PM Due Date : Apr 10, 2020 03:15 PM

Status : **Open**
Priority : **High**
Known Error : **No**

Problem Analysis Solution Tasks (0/0) Incidents (1) History

Description New Change

Problem Details Edit

Category	Services	Status	Open
Subcategory	Not Assigned	Urgency	High
Item	Not Assigned	Priority	High
Technician	administrator	Reported Date	Apr 8, 2020 03:14 PM
DueBy Date	Apr 10, 2020 03:15 PM	Closed Date	N/A
Impact	High	Services Affected	Business Application
Assets Involved	App1.test.local		

Problem to change association

- The reporting module of ServiceDesk Plus and the Advanced Analytics modules help you monitor and review the effectiveness of a problem resolution.

New Custom Report | New Query Report | New Schedule Report | Advanced Analytics | Custom Settings | Data Model: --View Data Model--

- Reports on Incident Requests
- Reports on Service Requests
- Reports by all requests
- Reports by completed requests
- Reports by SLA Violated requests
- Reports by pending requests
- Request Summary Reports
- Reports by All Problems
- Report on Problems by Category [Edit](#)
- Report on Problems by Status [Edit](#)
- Report on Problems by Priority [Edit](#)
- Report on Problems by Impact [Edit](#)
- Report on Problems by Technician [Edit](#)
- Report on Problems by Urgency [Edit](#)
- Reports on Pending Problems
- Reports on Completed Problems
- Reports by All Changes
- Reports on Pending Changes

ServiceDesk Plus: Bundled reporting

8.7 Service assurance

8.7.1 Service availability management

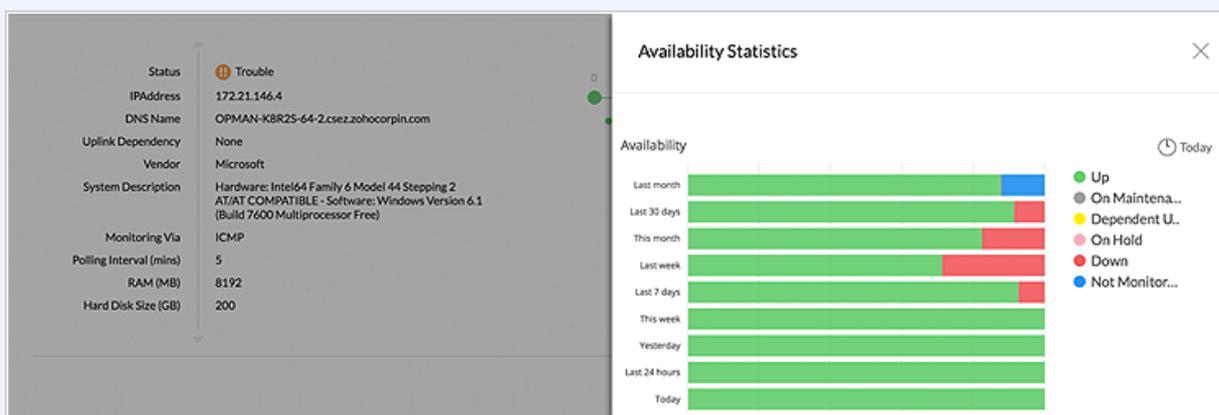
Addressed process requirement(s):

- Monitor service availability and compare the results with the targets.
- Investigate unplanned non-availability, and take necessary actions.
- The risks to service availability shall be assessed at planned intervals.

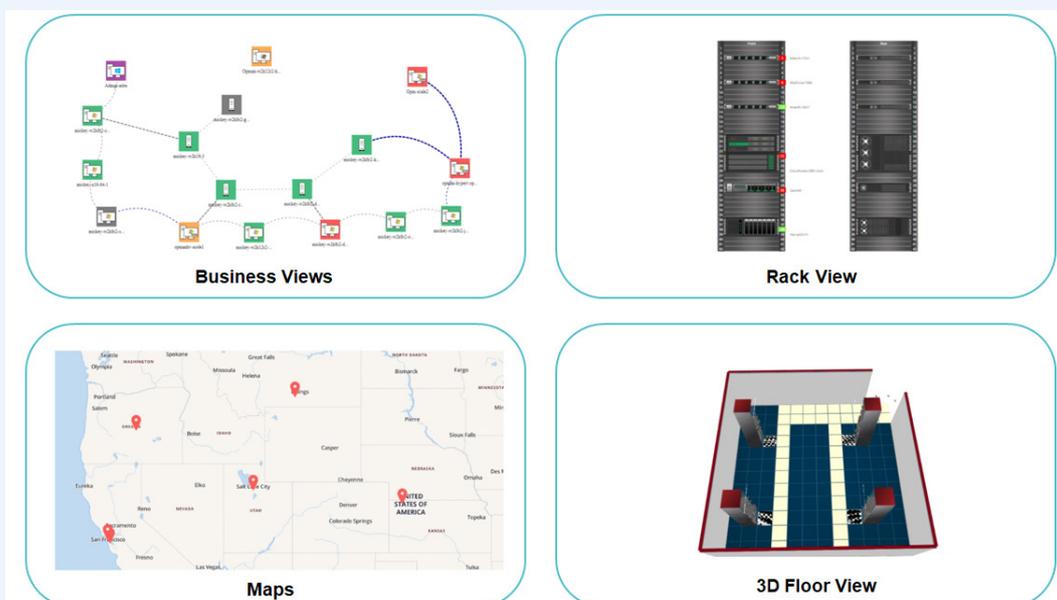
ManageEngine product that can help in implementing these processes:

OpManager Plus and Applications Manager

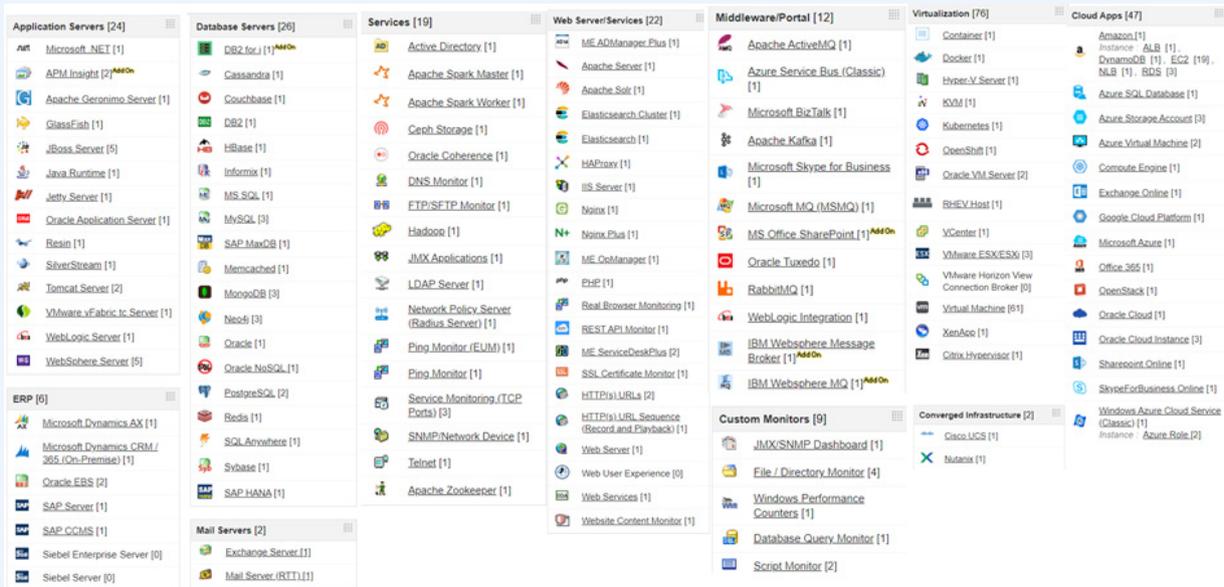
- Monitor the service availability based on all the dependent service components including network, servers, virtualization, storage, applications, databases, and websites, and compare them against the agreed target.



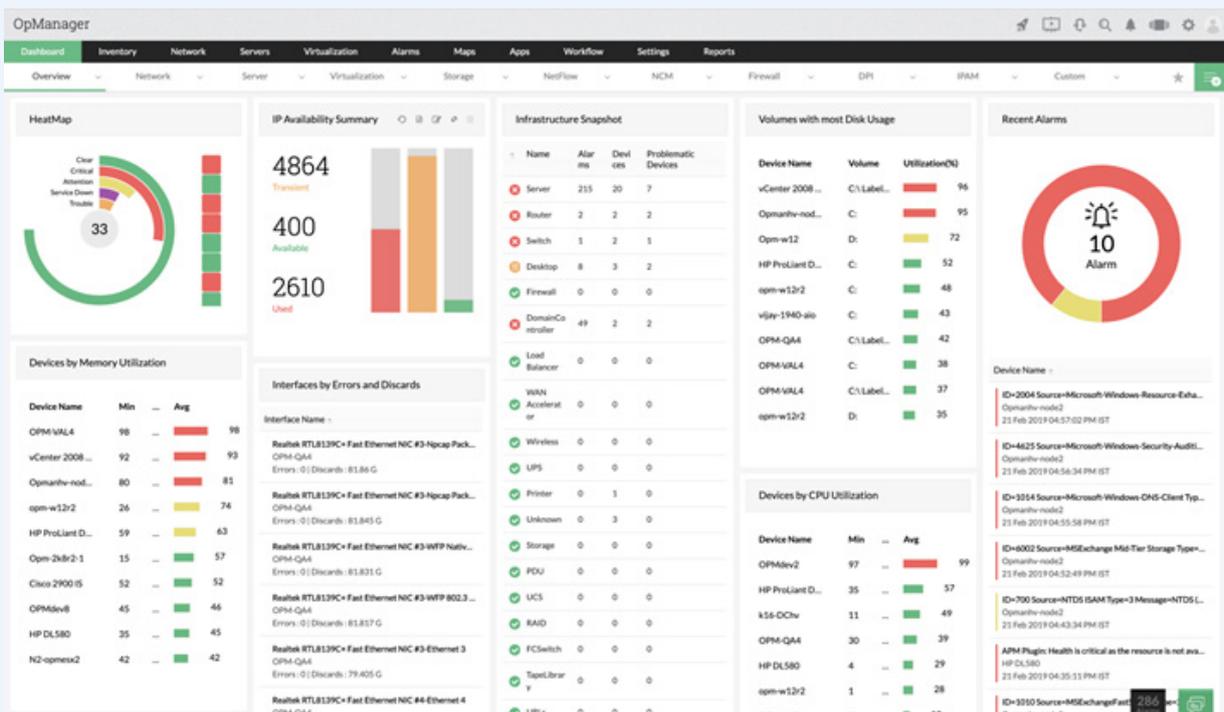
Availability statistics



Availability representation

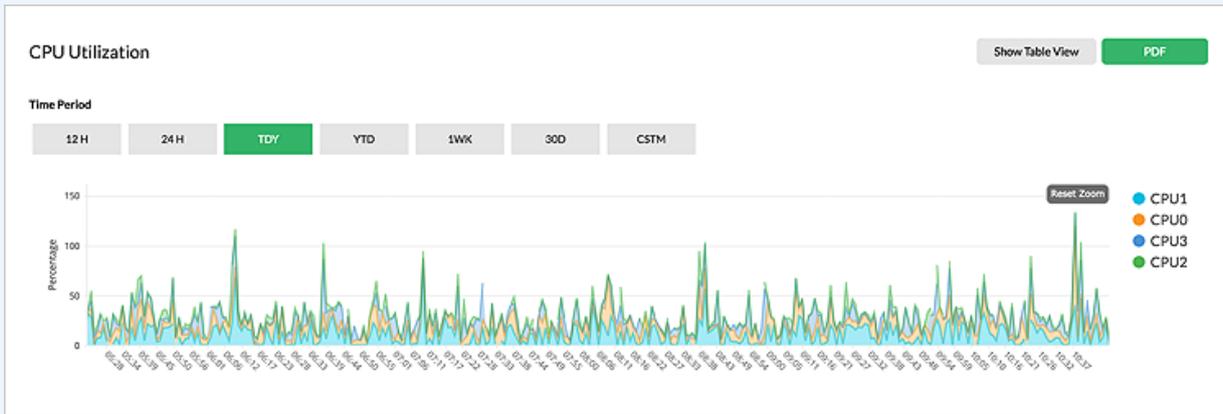


Applications monitoring

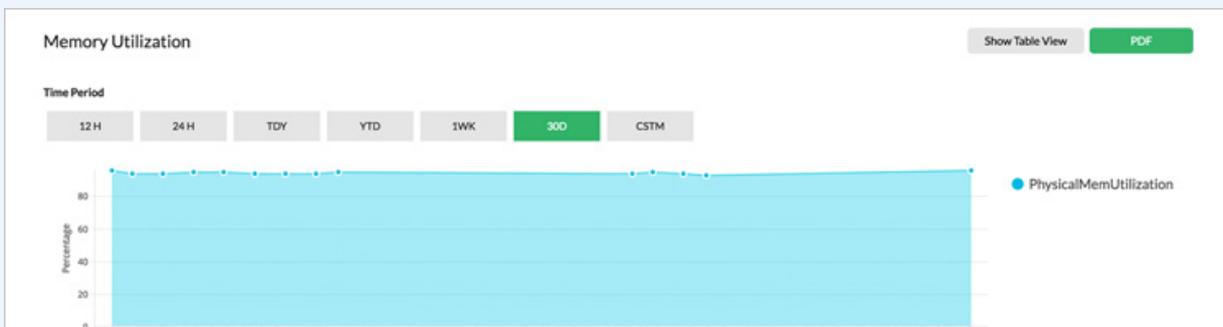


Monitoring dashboard

- Service components availability can be measured based on the performance metrics like response time, utilization, etc., and can be alerted on proactively to avoid unplanned downtime.



Performance monitoring: CPU



Performance monitoring: Memory

- Planned downtime can be marked to avoid false alarms. Unplanned downtime can be logged as incidents in ServiceDesk Plus and can be updated with investigated results/actions.

Device Downtime Schedules

Lets you avoid unnecessary alarms during planned maintenance of your network devices. [Learn more](#)

Name	Status	Type
DownTime_XenVMs	Running	Once
SampleSchedule	<input checked="" type="checkbox"/>	Every Day

[How To](#) [FAQ](#)

1. How to put set of devices under maintenance for certain period?

[Roadmap](#) | [N](#)

Add Schedule

Downtime Frequency

Once Every Day Every Week Every Month

From: Hours: Minutes:

To: Hours: Minutes:

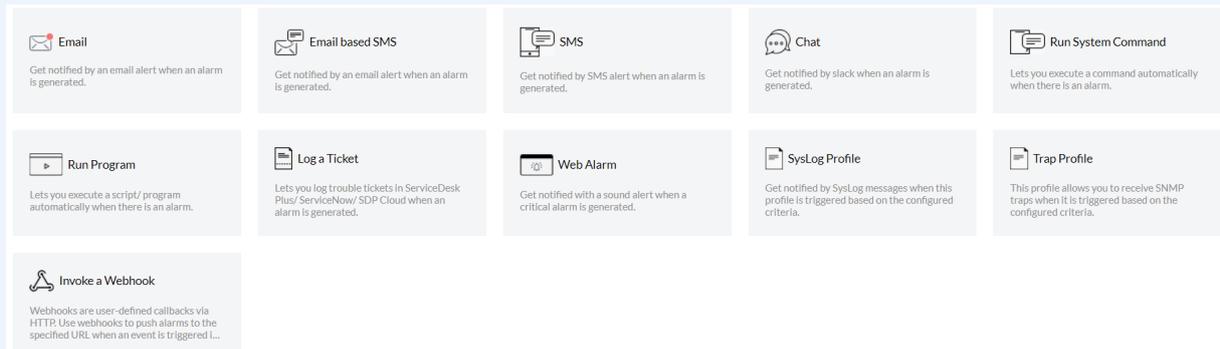
Filter by

Category Business Views Groups Devices URLs

Assign this schedule to all the devices in category

* Note: This is not applicable for any devices added to this category after this schedule is configured.

Downtime scheduler



Possible alarm notifications

- The monitored data is stored in the product databases for a configured period against which the risks to service availability can be generated considering various factors at planned intervals.

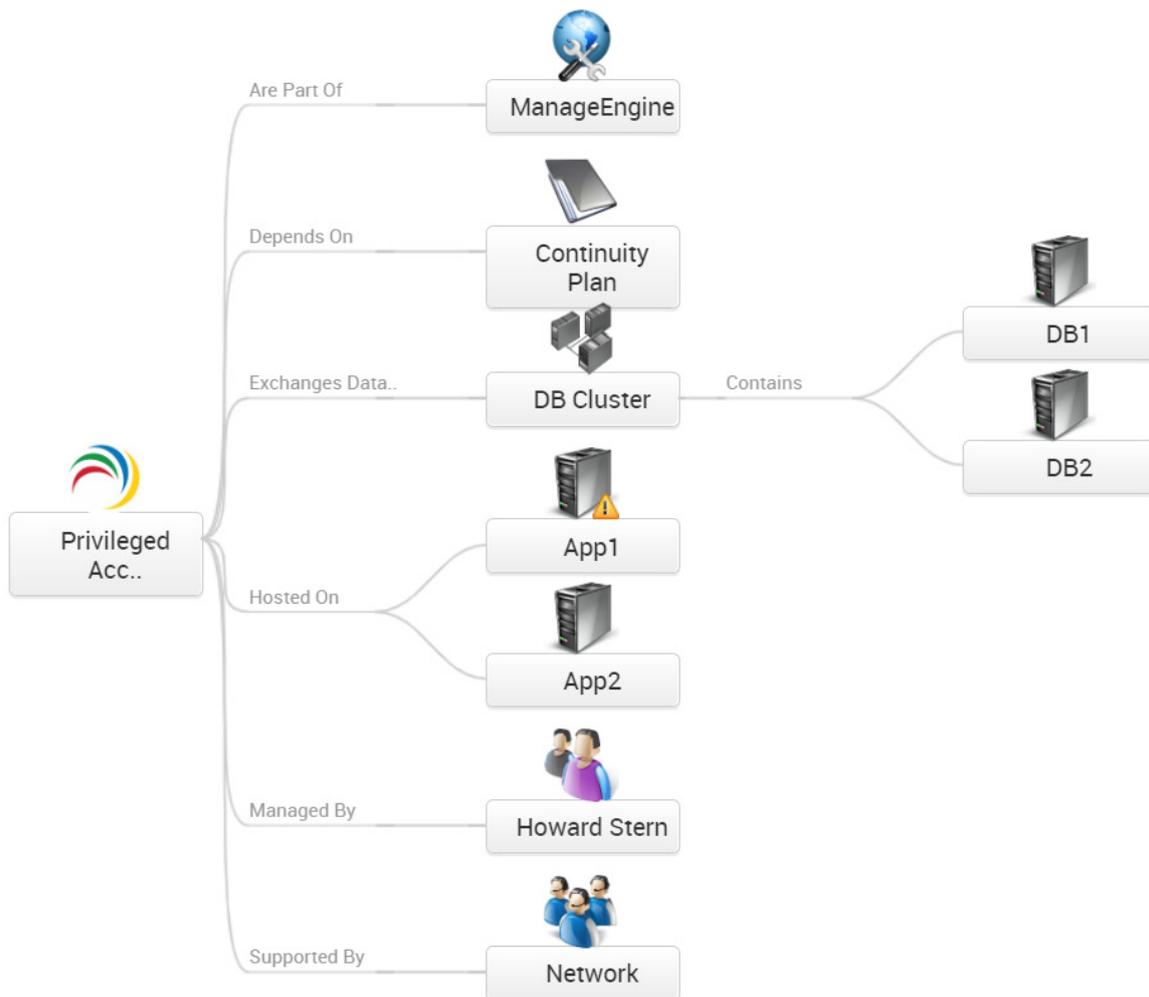
8.7.2 Service continuity management

Addressed process requirement(s):

- The service continuity plan(s) shall contain a reference to procedures for restoring services, steps to be followed in the event of a major loss of a service, and targets for service availability when continuity plans are involved.
- The continuity plan(s) shall be tested against the continuity requirements at periodic intervals. It shall be retested after major changes to the service environment. The results shall be recorded and reviewed. Necessary actions are to be taken when deficiencies are found.
- The risks to service continuity shall be assessed and documented at planned intervals.
- Document the cause, impact, and recovery when the continuity plan has been invoked.

ManageEngine products that can help in implementing these process- ServiceDesk Plus

- The ServiceDesk Plus CMDB module helps you to create references to documents containing continuity plans for the respective services.



Service relationship with continuity plan

- ServiceDesk Plus supports creating preventive maintenance tasks using which a request to test the continuity plan can be created and assigned to appropriate IT personnel at planned intervals.

Preventive maintenance schedule

- As part of the change/release management process in ServiceDesk Plus, testing the continuity plan can be made a mandatory task for all major changes. The cause, impact, and recovery when the continuity plan has been invoked can be

OpManager Plus and Applications Manager

- When the continuity plan is invoked, OpManager Plus and Applications Manager can help monitor the service and service components availability, health, and performance. The monitored data can be analyzed to identify deficiencies and risks to continuity based on various health and performance metrics.

OpManager	NetFlow	NCM	OpUtils	Firewall
System	Search Report	Hardware Inventory Report	Unused IP Addresses	Custom Report
Health and Performance	Report Profiles	Firmware Inventory	Reserved-Static IP Addresses	Firewall Reports
Availability and Response	Forensics	Device Inventory	IP Usage Summary	Proxy Reports
Inventory	Consolidated Report	Network Health Status	Switches by Usage	Policy Overview
WAN RTT Monitors	Compare Reports	Device Management Status	Switches by Scheduler	Policy Optimization
VoIP Monitors	Protocol Distribution	Device Audit	Switches by Vendor Name	Rule Cleanup
Virtual Servers Report	Inventory Report	Startup-Running Conflict	Switch Ports by ifSpeed	Rule Reorder
Storage Reports	Billing	Configuration Changes	Switch Ports by ifType	Rule Impact
Forecast Reports	Forecast	Configuration Change Trend	Device with Virtual IP	Standard
Nutanix Reports	Schedule	EOL/EOS Report	Stacked Port Details	Change Management
My Favorites	WAAS Dashboard	Compliance Report	Administratively Disabled Ports	Security Audit
Schedule Reports	WAAS Devices List	Configuration Analysis Report	Connected IP Details	Audit Logs
		Security Audit Report	Port by Operation Status Last Change Time	Rule Administration
		PCI Report	DHCP Reserved IP Addresses	Search Report

OpManager reports

- Monitor Group
- Trend Analysis Report
- Servers
- Application Servers**
- Database Servers
- Web Services
- Web Servers
- URLs/ Web Apps
- Services
- Mail Servers
- ERP
- Middleware/Portal
- Virtualization
- Cloud Apps
- Converged Infrastructure
- Custom Monitors
- Capacity Planning
- End User Monitoring(EUM)
- Forecast Report

At a Glance Report
At a Glance Report of Application Servers

Availability Reports
Availability of Application Servers

Health Reports
Health of Application Servers

Response Time
Response Time of Application Servers

Memory Usage
JVM Details of Application Servers

JDBC Connection Usage
JDBC Connection Pool Usage of Application Servers

Thread Details
Thread Details of Application Servers

Session Details
HTTP Session of Application Servers

Request Throughput
Request Throughput of Application Servers

Web Application Request Throughput
Web Application Throughput of Application Servers

Select Attribute

Reports in Applications Manager

8.7.3 Information security management

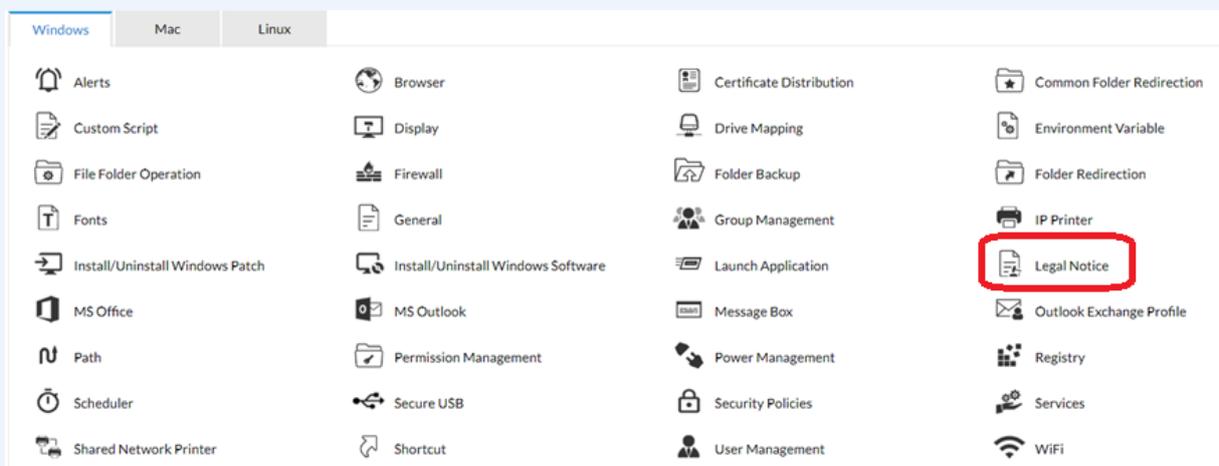
Addressed process requirement(s):

- The importance of conforming to the information security policy and its applicability shall be communicated to all interested parties.
- Information security controls shall be determined, implemented and operated to support the information security policy and address identified information security risks from both internal and external users.
- Monitor and review the effectiveness of information security controls and take necessary actions.
- Information security incidents shall be recorded, classified, prioritized, escalated if needed, resolved, and closed.
- Analyze the information security incidents by type, volume and impact on the SMS, services, and interested parties to identify opportunities for improve-

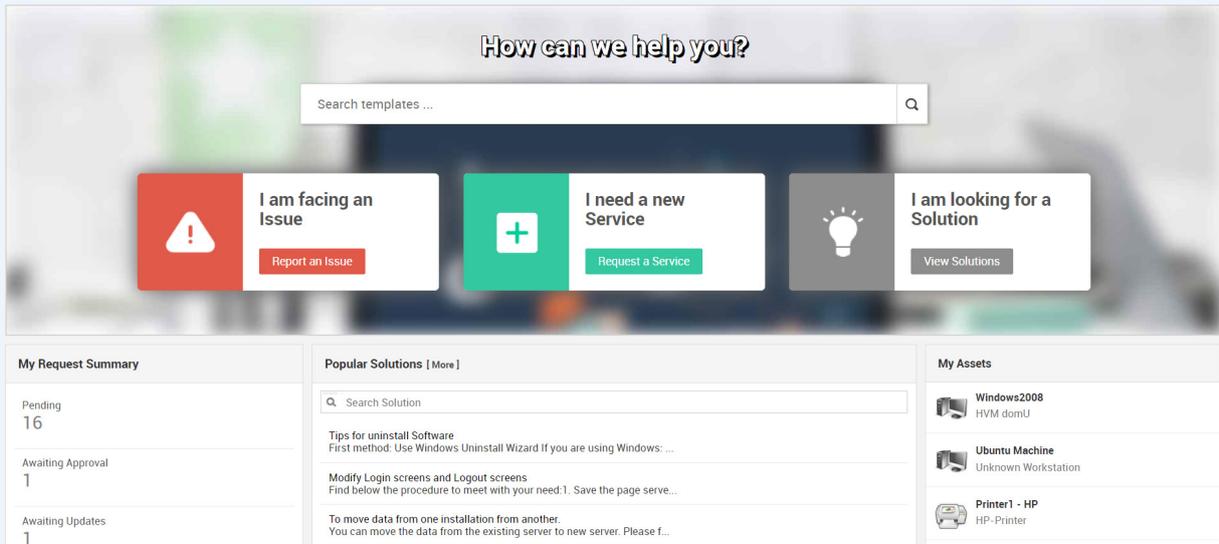
ManageEngine products that can help in implementing these process-

Endpoint Central

- The configuration management module helps you to publish the information security policy to all users of the organization through a logon Legal Notice. The policies can also be published through the ServiceDesk Plus self-service portal.

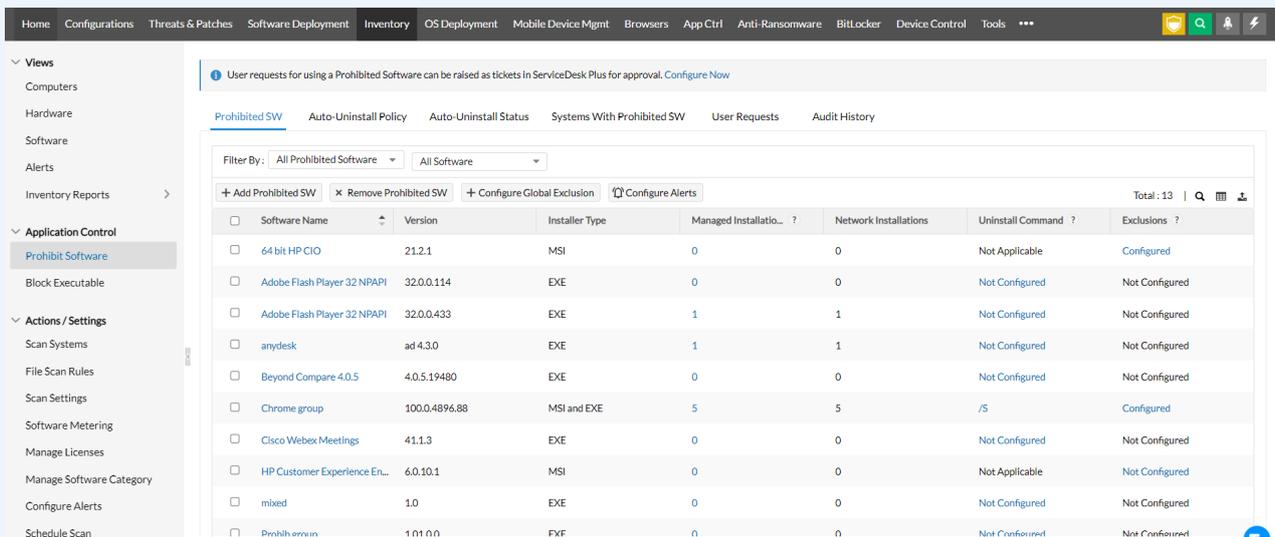


Endpoint Central: Manage configurations

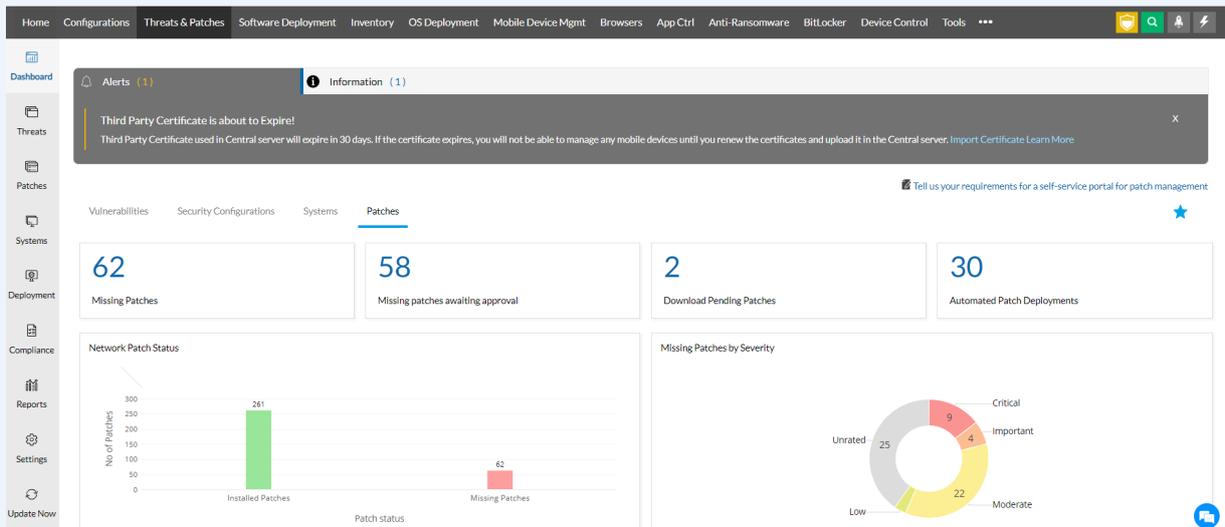


ServiceDesk Plus: Self-service portal

- Deploy the security controls required on endpoints like prohibiting specific software installation, blocking executables, blocking USBs, patching, recording the remote sessions, and securing mobile devices, browsers, and so on.



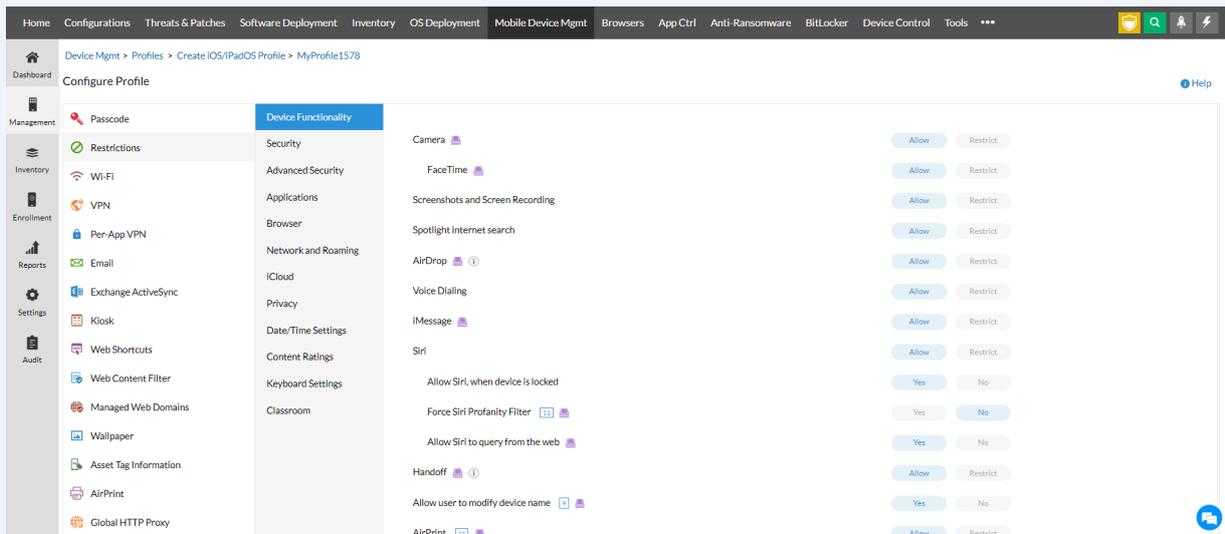
Endpoint Central: Control software and executable installation



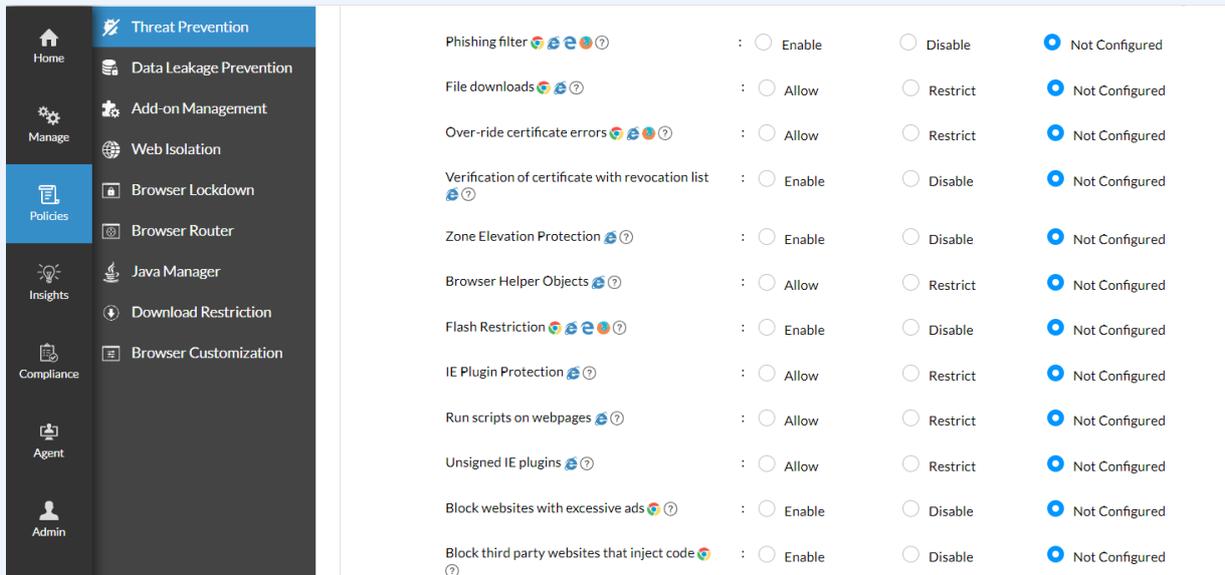
Endpoint Central: Comprehensive patch management

Configuration Name	Category	Type	Status	Created By	Last Modified Time	Action	Total Targets	Summary	Not Applicable	Failed	Successful	Yet To Apply	Last Modified By
My Web Tool Test		Install/Uninstall Windows Software	Suspended	admin	Feb 8, 2019 03:58 AM		1	Total Targets (1): Rate --	0	0	0	0	admin
MyConfiguration57348		Install/Uninstall Windows Software	Ready To Execute	admin	Feb 8, 2019 03:58 AM		1	Total Targets (1): Not --	0	0	0	1	admin
MyConfiguration57345		Install/Uninstall Windows Software	In Progress	admin	Feb 8, 2019 03:57 AM		1	Total Targets (1): Not --	0	0	0	1	admin
MyConfiguration57346		Install/Uninstall Windows Software	Suspended	admin	Nov 26, 2018 11:57 PM		1	Total Targets (1): Rate --	0	0	0	0	admin
MyConfiguration57347		Install/Uninstall Windows Software	Ready To Execute	admin	Nov 13, 2018 05:00 PM		1	Total Targets (1): Not --	0	0	0	1	admin
MyConfiguration57349		Install/Uninstall Windows Software	Executed (Failed)	admin	Nov 13, 2018 02:42 PM		1	Total Targets (1): Fail --	0	1	0	0	admin
MyConfiguration57350		Install/Uninstall Windows Software	Executed	admin	Nov 13, 2018 02:33 PM		1	Total Targets (1): Succ --	0	0	1	0	admin
MyConfiguration57351		Install/Uninstall Windows Software	Executed	admin	Nov 13, 2018 02:27 PM		1	Total Targets (1): Succ --	0	0	1	0	admin
MyConfiguration57352		Install/Uninstall Windows Software	Ready To Execute	admin	Oct 30, 2018 03:52 PM		1	Total Targets (1): Not --	0	0	0	1	admin
MyConfiguration54536		Install/Uninstall Windows Software	Executed (Failed)	admin	Sep 26, 2018 03:11 AM		1	Total Targets (1): Fail --	0	1	0	0	admin
Baseline SW Deployment Test		Install/Uninstall Windows Software	Ready To Execute	admin	Sep 19, 2018 06:24 PM		0	Total Targets (0): --	0	0	0	0	admin
MyConfiguration52936		Install/Uninstall Windows Software	Suspended	admin	Aug 30, 2018 01:21 PM		2	Total Targets (2): Not --	0	0	0	1	admin
Test Chrome User		Install/Uninstall Windows Software	In Progress (Failed)	admin	Aug 25, 2018 04:15 AM		2	Total Targets (2): Fail --	0	2	0	0	admin
MyConfiguration52895		Install/Uninstall Windows Software	Ready To Execute	admin	May 17, 2018 08:15 PM		0	Total Targets (0): --	0	0	0	0	admin
MyConfiguration50530		Install/Uninstall Windows Software	In Progress (Failed)	admin	Feb 22, 2018 09:37 AM		30	Total Targets (30): Sec...	0	5	2	0	admin

Endpoint Central: Recorded remote sessions



Endpoint Central: Securing mobile devices



Browser risk management

AD360

- Deploy the security controls required for accessing and managing Active Directory, Exchange, and Microsoft 365 securely through the delegated capabilities. It also helps to deploy required controls for users to change/reset the password, unlock accounts through multiple identity verification methods, and implement multi-factor authentication for users to log in to their machines.

ADManager Plus License AD Explorer Search AD Objects

Home Management Reports Office 365 Delegation Workflow Automation Admin Backup Support Domain Settings

Business Workflow Define an order of execution for important administrative tasks. [Learn more...](#) Create Request

Workflow Name:

Description:

Workflow Stages:

```

    graph LR
      Requester[Requester] --> Reviewer[Reviewer]
      Reviewer --> Approver[Approver]
      Approver --> Executor[Executor]
  
```

Requester The one who raises a request for a particular action. [Configure](#)

Reviewer The one who assesses the request, weighs its pros and cons, and offers recommendations. [Configure](#)

Approver The one who possesses the authority to finalize an action. [Configure](#)

Executor The one who executes the approved action. [Configure](#)

No. of Reviewers: 1 No. of Approvers: 1

Create Workflow Cancel

Action	Workflow Name	Description	Workflow Stages
	Default business workflow	This is a predefined workflow present in the product.	Requester → Executor
	User onboarding workflow	This workflow will be used while processing the request for user account creation.	Requester → Reviewers: 1 → Executor
	Stale accounts cleanup workflow	This workflow will be used while processing stale accounts cleanup.	Requester → Reviewers: 2 → Executor
	User password reset workflow	This workflow will be used while processing password reset requests.	Requester → Reviewers: 2 → Approver: 2 → Executor

Commit changes in AD on approval

AD Management AD Reports Administration Office 365 Backup

User Management Computer Management Group Management Contact Management Mailbox Management OU Management File Server Management GPO Management

Bulk User Management

Create Users [User Attribute Privileges](#)

Create Single User

Create Bulk Users

Modify Users [?](#)

Modify Single User

Modify Bulk Users

User Templates

User Creation Templates [?](#)

User Modification Templates [?](#)

Deny Bulk Modification

Bulk User Modification

General Attributes

- Reset Password [?](#)
- Group Attributes [?](#)
- Unlock Users [?](#)
- Move Users [?](#)
- Delete Users [?](#)
- Account Attributes [?](#)
- Restore Deleted Users
- Address/Organization Attributes [?](#)
- Naming Attributes [?](#)
- Profile Attributes [?](#)
- Move/Delete Home folders [?](#)
- Contact Attributes [?](#)
- Modify Custom Attributes [?](#)

Exchange Attributes

- Create/Archive MailBox [?](#)
- Modify SMTP Address
- Set MailBox Rights
- Delivery Options [?](#)
- Naming Attributes [?](#)
- Exchange Features [?](#)
- Auto Reply [?](#)
- Delivery Restrictions [?](#)
- Storage Limits [?](#)
- Migrate Mailbox
- Exchange Offline Address Book
- Disable/Delete User MailBox [?](#)
- Exchange Policies [?](#)

Terminal Services

- Profile Attributes [?](#)
- Remote Control Attributes [?](#)
- Session Attributes [?](#)
- Environment Attributes [?](#)
- Move/Delete TS Home folders [?](#)
- Dial-in [?](#)

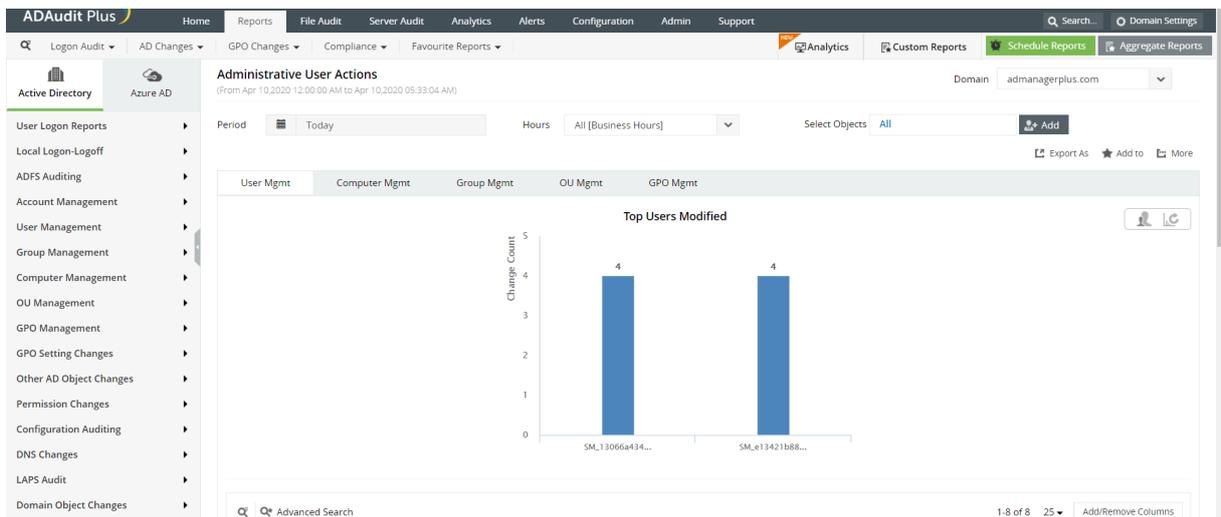
Delegate access for AD management

User Reports Password Reports Group Reports Computer Reports Exchange Reports Contact Reports Terminal Service Reports GPO Reports OU Reports NTFS Reports Security Reports Other Reports Compliance Reports G Suite Reports Custom Reports

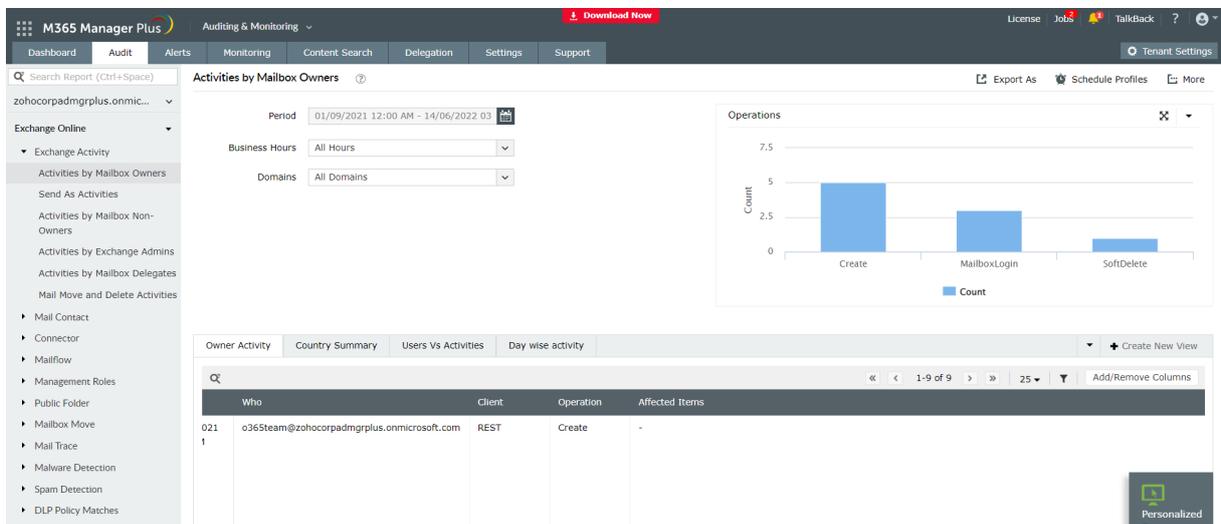
Compliance Reports

SOX	HIPAA	PCI	FISMA
All Users	Recently Logged On Users	Recently Logged On Users	Recent Logon Failures
All Groups	Recent Logon Failures	Recent Logon Failures	Real Last Logon
All Computers	Real Last Logon	Real Last Logon	Users with Password Never Expires
All Contacts	Users With Terminal Server Access	Locked-out Users	Password Changed Users
All OUs	Recently Created Users	Users in Groups	Recently Created Users
All GPOs & Linked AD Objects	Recently Modified Users	Shares in the Servers	Recently Modified Users
Office 365 Users		Permissions for Folders	
GLBA	GDPR		
Recently Logged On Users	Shares in the Servers		
Recent Logon Failures	Permissions for Folders		
Real Last Logon	Folders accessible by Accounts		
Users with Password Never Expires	Server Permissions		
Password Changed Users	Subnet Permissions		
Security Groups	Servers accessible by Accounts		
	Subnets accessible by Accounts		

Compliance reports for AD management

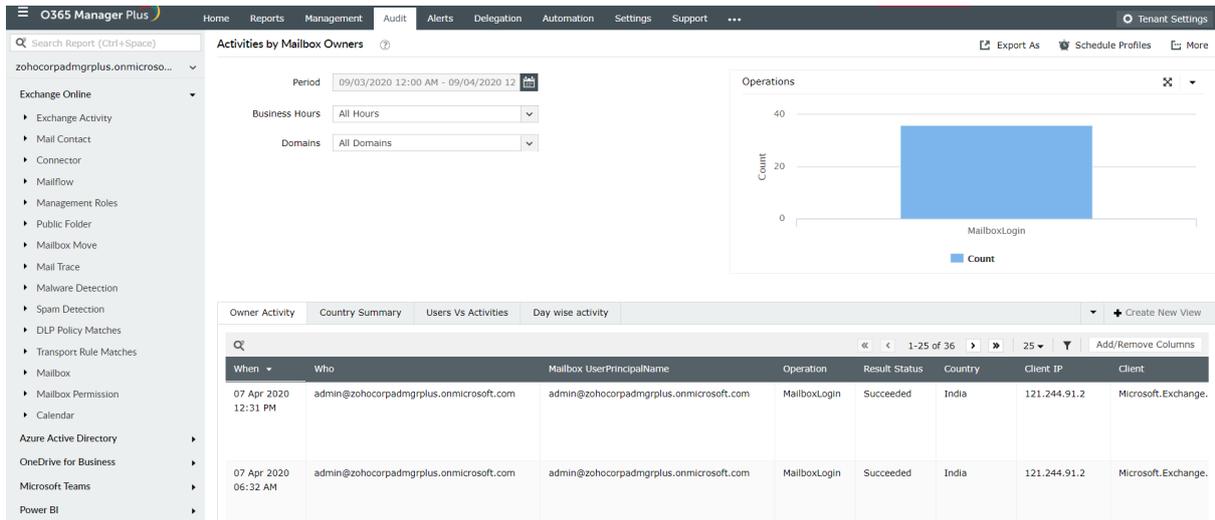


AD and file server change auditing



M365 management auditing and reporting

Securely self manage passwords and accounts



M365 management auditing and reporting

ADSelfService Plus | Download Now

Dashboard | Reports | Configuration | Admin | Support

Self-Service

- Policy Configuration
- Multi-factor Authentication
- Password Expiration Notification
- Password Policy Enforcer**
- Password Sync/Single Sign On
- Conditional Access
- Directory Self Service
- Administrative Tools
- Security Center

Password Policy Enforcer

Select the Policy: adselfservice.com

Enforce Custom Password Policy

Restrict Characters 6/7

- Restrict Repetition 3/4
- Restrict Pattern 3/3
- Restrict Length 2/2

Number of special characters to include: 2

Number of numeric characters to include: 1

Number of unicode characters: 1

Must contain at least 1 upper case character.

Must contain at least 1 lower case character.

Password must begin with: an uppercase alphabet, a low

Disallow numeric last character.

Override all complexity rules if password length is at least: 20

Password must satisfy at least: of the above complexity requirements.

Show this policy requirement in Reset and Change Password pages

Securely self manage passwords and accounts

Exchange Reporter Plus | Home | Reporting | Auditing | Monitoring | Settings | Support

Exchange Server | Exchange Online | Skype Server

Mailboxes | Schedule Report | Create New Report

Mailboxes

- OWA & ActiveSync
- Email Traffic
- Storage
- Distribution Lists
- Public Folders
- Organization
- Custom Reports
- Compliance

General Reports

- Mailbox Enabled Users
- Hidden Mailboxes
- Mailbox Features
- Mailbox Message Delivery Settings
- Mailbox Storage Information
- Mailbox Message Restrictions
- Mailbox with Delegates
- Mailbox with ForwardTo
- Forward Set Inbox Rules

Account Status Reports

- Recently Created Mailboxes
- Inactive Mailboxes by Last Sent Mail
- Inactive Mailboxes by Last Received Mail
- Inactive Mailboxes by Last Logon Time
- Disconnected Mailboxes
- Expired Account Mailboxes
- Soon-to-expire Account Mailboxes
- Mailbox Auto Reply Status

Permission Reports

- Permissions Based on Mailboxes
- Permissions Based on Users
- Non-Owner Mailbox Permission

Retention Policies Reports

- Retention Policies
- No. of Mailboxes with Policies
- Mailboxes with Policies
- Retention Policies Details
- Mailboxes without Retention Policies

Size Reports

- Mailbox Size
- Mailbox Size Growth
- Mailbox Size By OU
- Current Mailbox Size Vs Quota
- Mailbox Size Restrictions
- Server based Mailbox Growth
- Database based Mailbox Growth

Content Reports

- Message Count and Size Summary
- Attachments by File Size
- Attachments by File Extension Keyword
- Attachments by File Name Keyword
- Messages by Body Keyword
- Messages by Subject Keyword
- Folder-wise Unread Mails with Subject
- Folder Message Count And Size

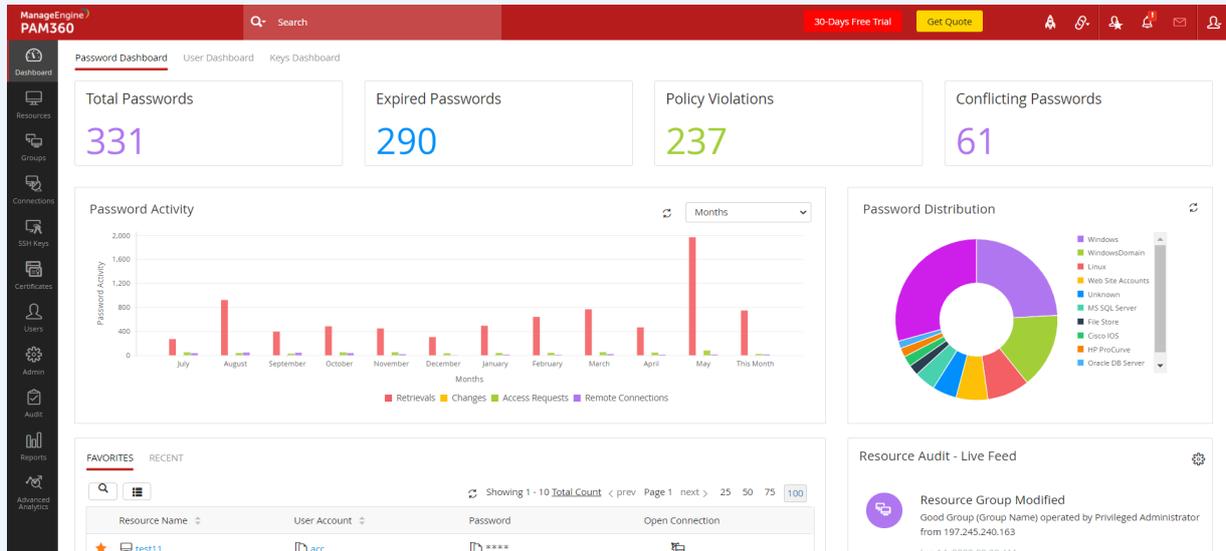
Resource Mailbox Reports

- Equipment Mailbox Details
- Room Mailbox Details

Exchange auditing and reporting

PAM360

- Deploy the required controls on privileged access to both internal and external users for any service component like network devices, servers, databases, etc. The passwords of the service components can be stored securely and access to them can be granted based on approval. It records the privileged session and has the capability to provide just-in-time privilege escalation as well.



Secured privileged password management

The screenshot displays the PAM360 SSH Key Management interface. The table below shows the details of the SSH keys:

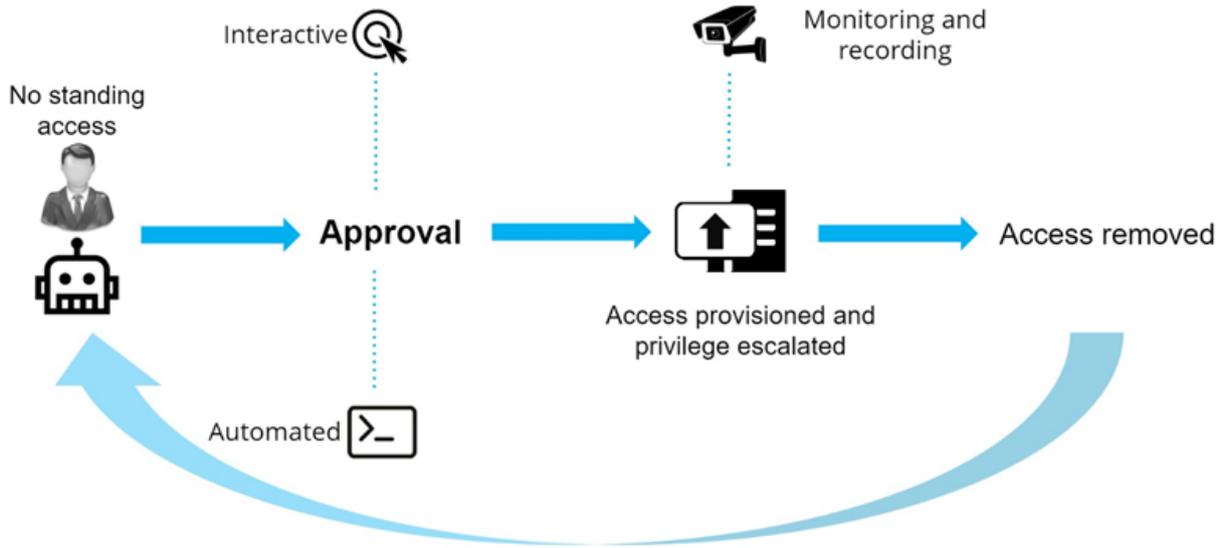
Key Name	Key Type	Key Length	Finger Print	Created By	Age	Application Name	Application Owner
<input type="checkbox"/> XUV-IN-SEC-009	ssh-rsa	4096	SHA256:xFS66DZi4gQ3/r9pI8X0HnZB3rY38...	pradmin	104 days		
<input type="checkbox"/> LIN-SER-065	ssh-rsa	2048	SHA256:dd43QFsjxt6tsWFOCYmu7TXhM5B...	pradmin	615 days		
<input type="checkbox"/> RT-CISCO-IOS-001	ssh-rsa	2048	SHA256:0pe94MjLd0ArUzdopsjXhGdaekqzSY...	pradmin	979 days		
<input type="checkbox"/> PROXY-SERVER-LIN09	ssh-rsa	1024	SHA256:yF53BZ5KL+5QznUhiI9j3+Uj7qHHSX...	pradmin	979 days		

SSL/SSH key management

The screenshot displays the PAM360 Audit interface showing recorded connections. The table below shows the details of the recorded sessions:

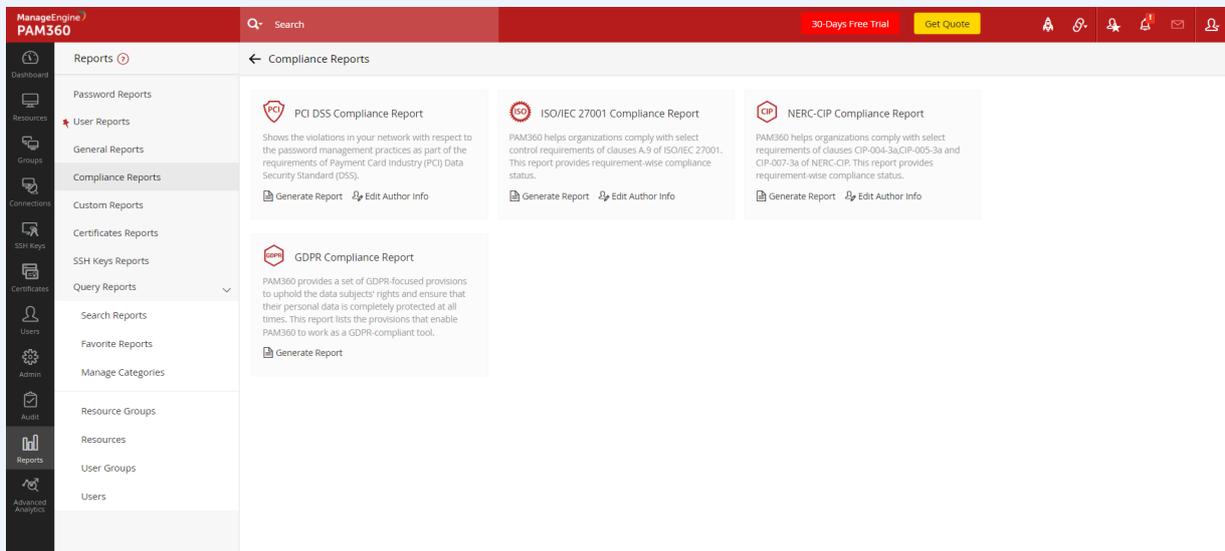
Resource Name	User Account	Operated By	IP Address	Status	Time Stamp	Play	Activity Logs
LIN-SER-065	test	admin	priyanka-6881.csez.zohocorpin.com	Success	Oct 8, 2019 04:05 PM	-	
LIN-SER-065	test	admin	priyanka-6861.csez.zohocorpin.com	Success	Oct 8, 2019 04:07 PM	-	
LIN-SER-065	test	admin	priyanka-6861.csez.zohocorpin.com	Success	Oct 8, 2019 04:08 PM		
PROXY-SERVER-WIN-035	administrator	admin	priyanka-6861.csez.zohocorpin.com	Success	Oct 8, 2019 04:12 PM		
PROXY-SERVER-WIN-035	administrator	admin	priyanka-6861.csez.zohocorpin.com	Success	Oct 8, 2019 04:12 PM		
LIN-SER-065	test	admin	priyanka-6861.csez.zohocorpin.com	Success	Oct 8, 2019 04:38 PM		

Activity audit: Recorded sessions



Just-in-time privilege escalation

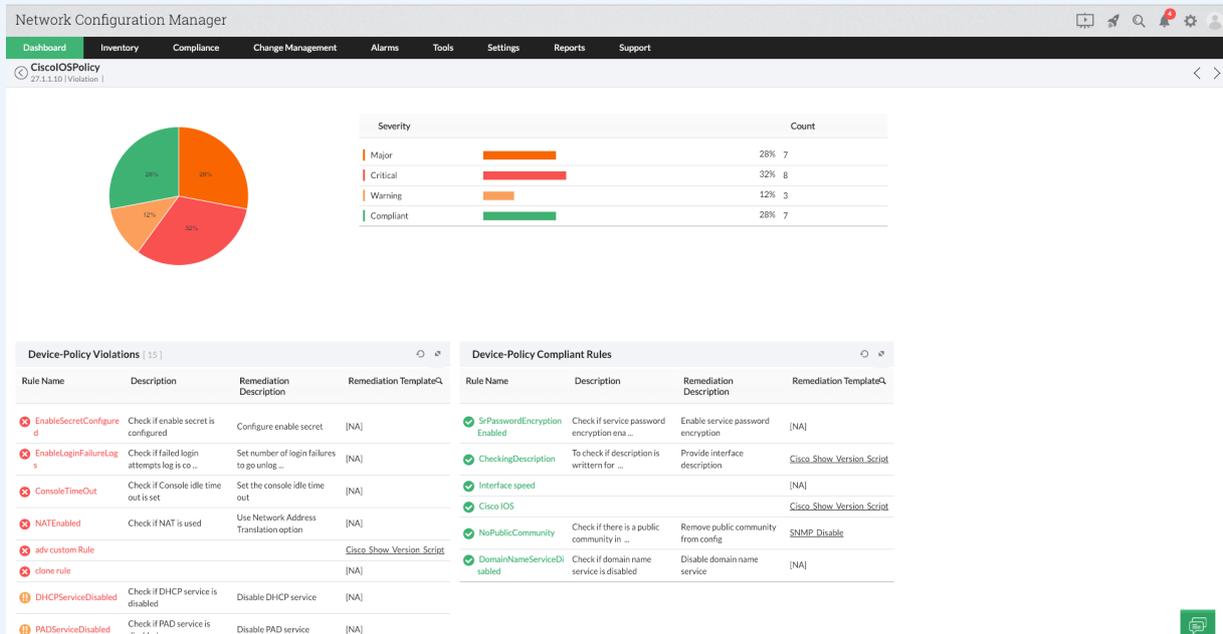
- The stored password can be changed post access or periodically using the configured password policy. It provides reporting on ISO 27001 as well by de-



Compliance reports

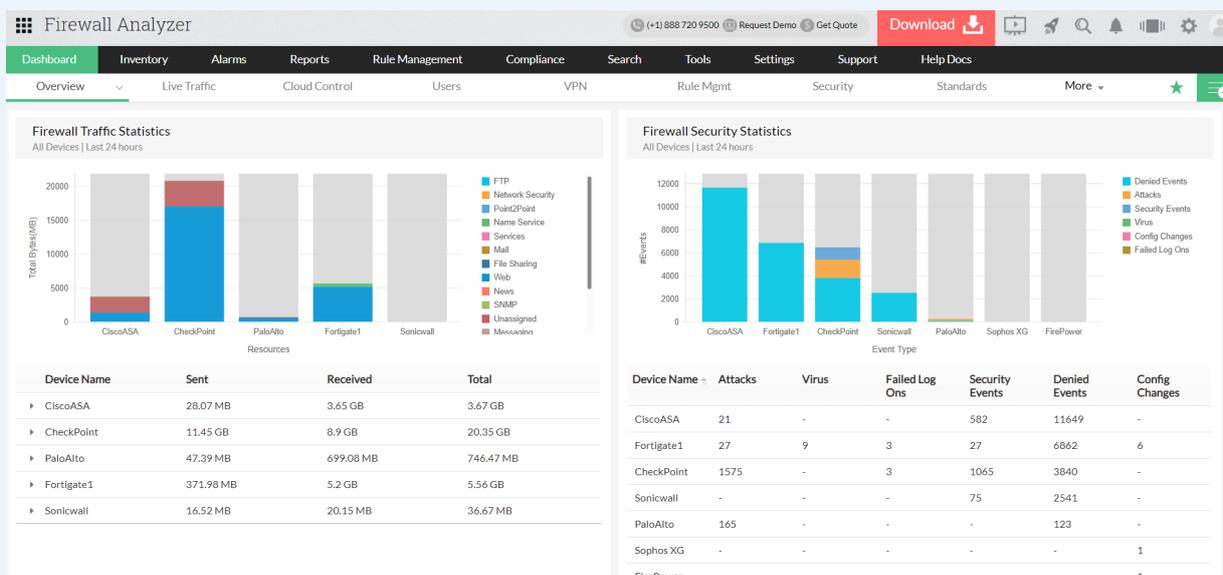
OpManager Plus

- The Network Configuration Manager component of OpManager Plus helps to track whether all the network devices are compliant based on a set of policies.

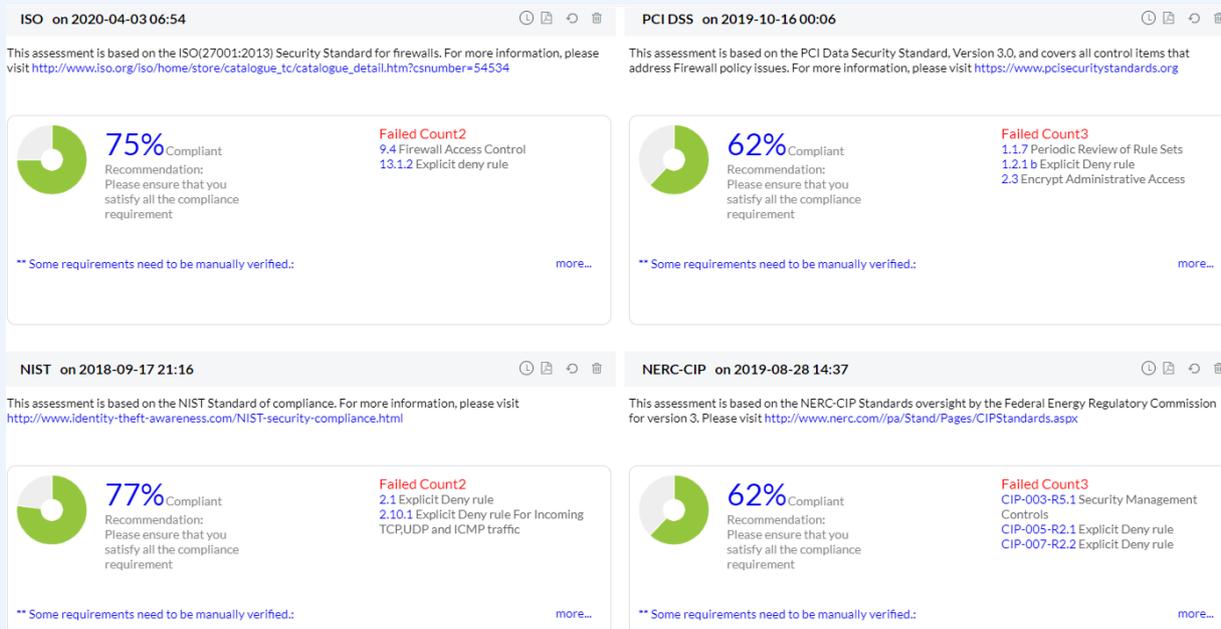


Compliance check for network devices

- The Firewall Analyzer component helps you to analyze firewall logs for threat and risks on firewalls.



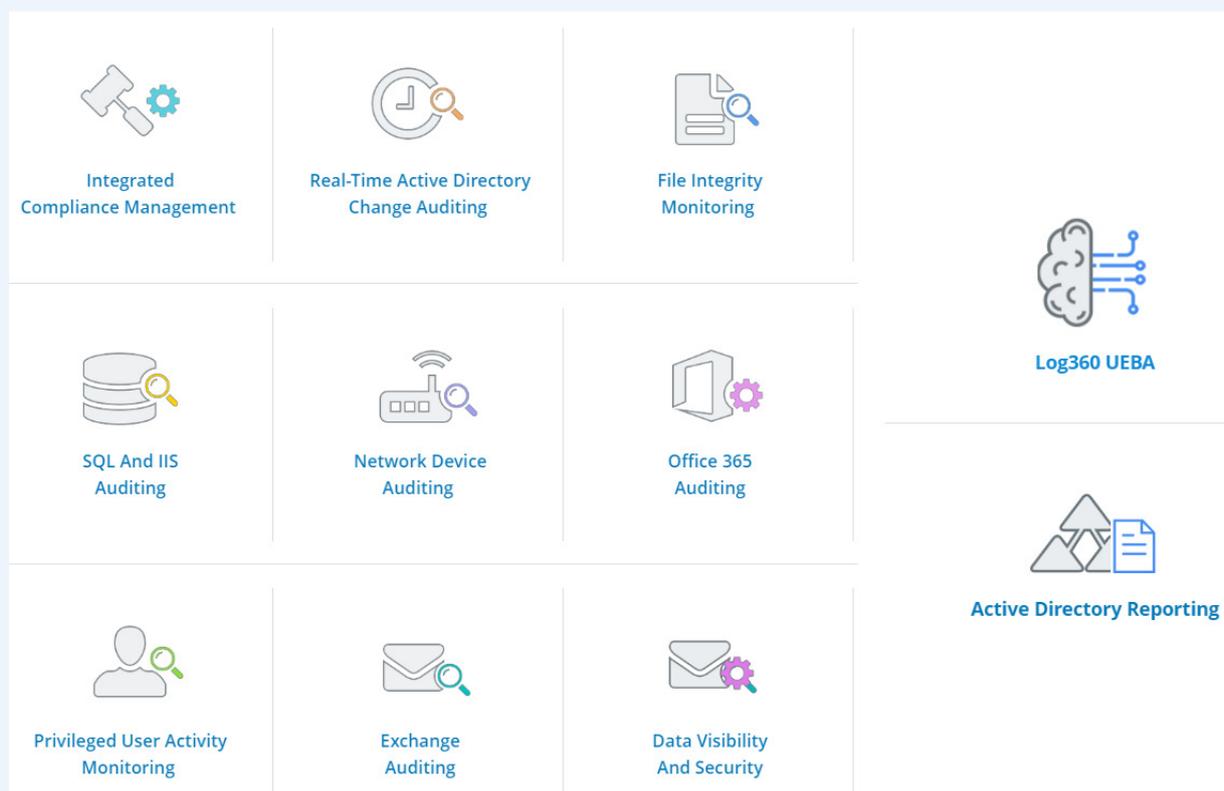
Firewall log management



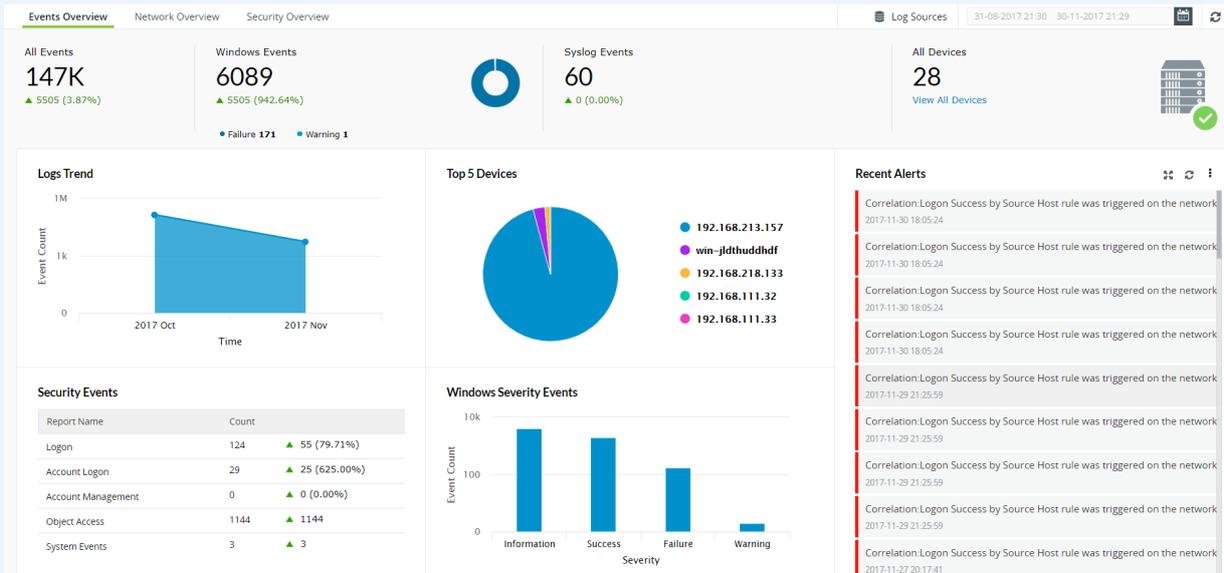
Firewall log management

Log360

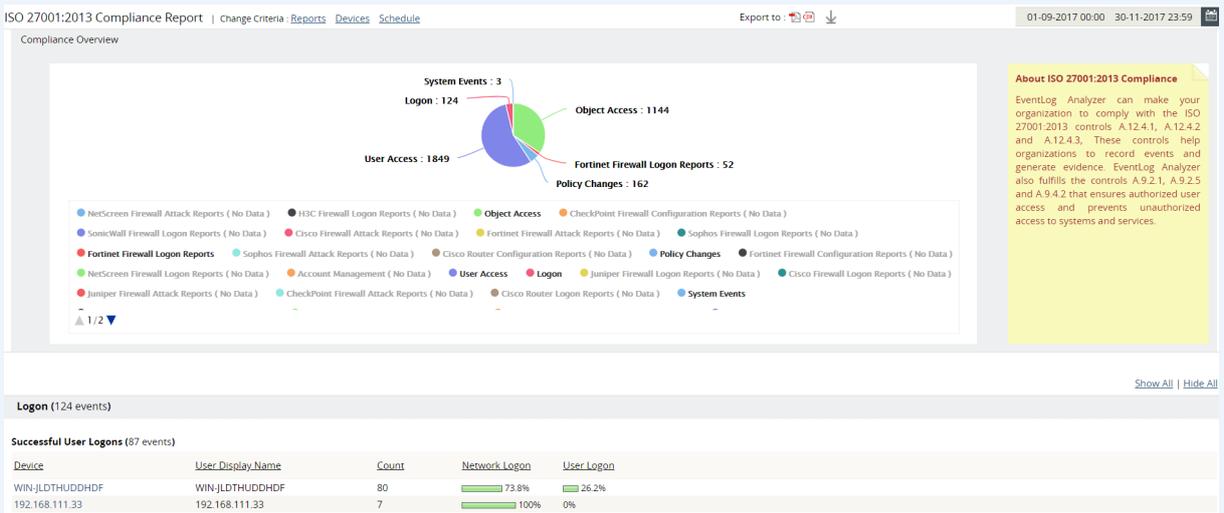
- Audit the changes and activities on Active Directory, file servers, network devices, servers, applications, databases, workstations, Microsoft 365, Exchange, AWS, Azure, etc., which serves as a evidence against the implemented controls and also to evaluate the effectiveness and to identify opportunities for improvement.



Log 360: Comprehensive SIEM solution



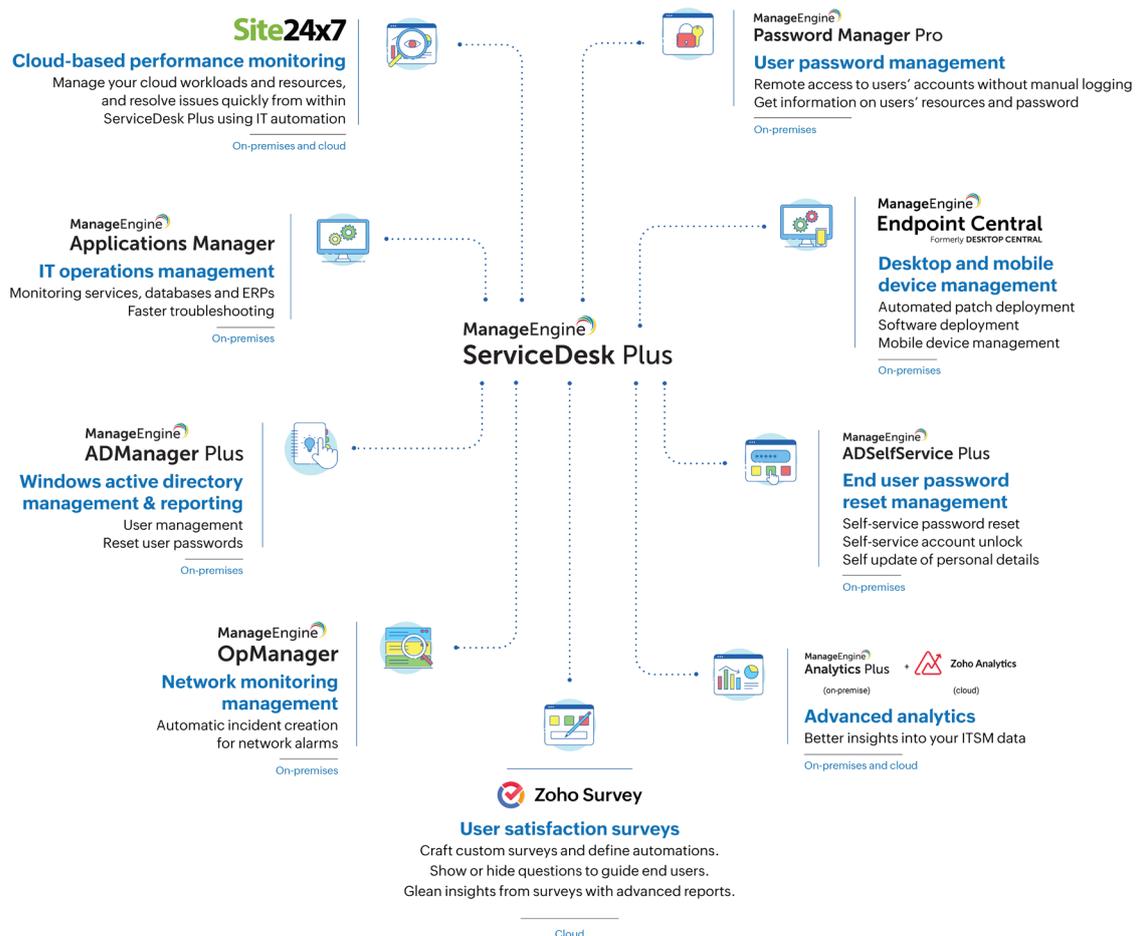
Events overview



Compliance reports

ServiceDesk Plus

- Information security incidents can be logged in ServiceDesk Plus as a separate type of incident and can follow its SLA and process. By default, ManageEngine products can be integrated with ServiceDesk Plus through the possible incident creation methods like email or API to report on security incidents. Reporting helps you to analyze incidents and identify opportunities for improvement.



"On-premises" and "cloud" denote the deployment model of ServiceDesk Plus, where these integrations are available.

Out-of-the box integrations



Clause 9:
**Performance
evaluation**

9.4 Service reporting

Addressed process requirement(s):

- Reports on the performance and effectiveness of the services shall be produced and shall include trends.
- The reports required are specified in the relevant clauses. Additional reports can also be produced.

ManageEngine product that can help in implementing these processes:

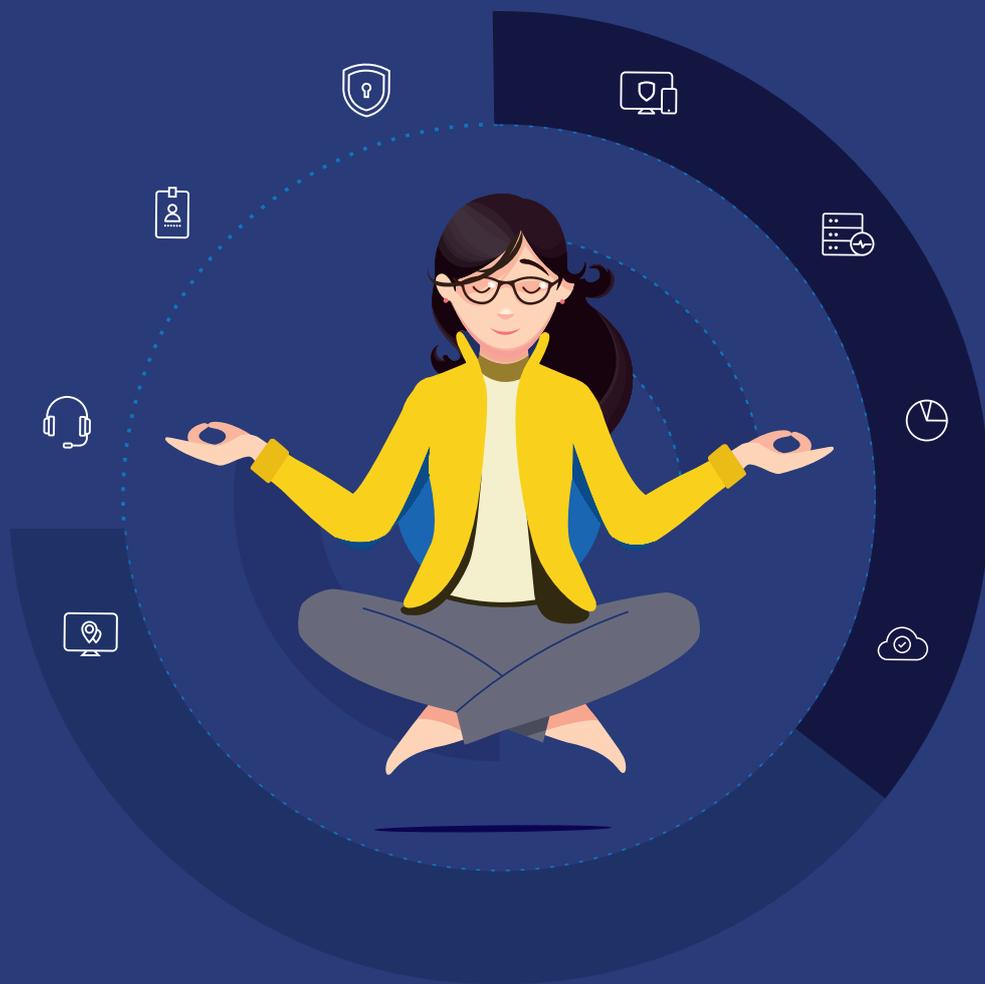
- All the proposed ManageEngine products by default provide reporting based on the functionalities they offer. They also store and maintain the trend based on the configured time period. Apart from the default reports, ManageEngine products offer options to create custom reports based on the need, and extensive reporting is possible through the Advanced Analytics.



Reporting using advanced analytics

Bringing IT together

ManageEngine crafts comprehensive
IT management software for all your
business needs.



Available for

Enterprise IT Managed service providers (MSPs) as
Self hosted on-premises
Self hosted in public cloud (AWS, Azure)
Cloud (SaaS)

Enterprise service management

- Full-stack ITSM suite
- IT asset management with CMDB
- Knowledge base with user self-service
- Built-in and custom workflows
- Orchestration of all IT management functions
- Service management for all departments
- Reporting and analytics

Identity and access management

- Identity governance and administration
- Privileged identity and access management
- AD and Azure AD management and auditing
- SSO for on-premises and cloud apps with MFA
- Password self-service and sync
- Microsoft 365 & Exchange management and auditing
- AD & Exchange -backup and recovery
- SSH and SSL certificate management

Security information and event management

- Unified SIEM for cloud and on-premises
- AI driven user and entity behavior analytics
- Firewall log analytics
- Data leakage prevention and risk assessment
- Regulatory and privacy compliance

Unified endpoint management

- Desktop and mobile device management
- Patch management Endpoint device security
- OS and software deployment
- Remote monitoring and management
- Web browser security
- Monitoring and control of peripheral devices

IT operations management

- Network, server, and application performance monitoring
- Bandwidth monitoring with traffic analysis
- Network change and configuration management
- Application discovery and dependency mapping
- Cloud cost and infrastructure monitoring
- End-user experience monitoring
- AIOps

Advanced IT analytics

- Self-service IT analytics
- Data visualization and business intelligence for IT
- Hundreds of built-in reports and dashboards
- Instant, flexible report creation
- Out-of-the-box support for multiple data sources

About ManageEngine

ManageEngine crafts the industry's broadest suite of IT management software. We have everything you need — more than 90 products and free tools — to manage all of your IT operations, from networks and servers to applications, service desk, Active Directory, security, desktops, and mobile devices.

Since 2002, IT teams like yours have turned to us for affordable, feature-rich software that's easy to use. You can find our on-premises and cloud solutions powering the IT of over 280,000 companies around the world, including nine of every ten Fortune 100 companies.

As you prepare for the IT management challenges ahead, we'll lead the way with new solutions, contextual integrations, and other advances that can only come from a company singularly dedicated to its customers. And as a division of Zoho Corporation, we'll continue pushing for the tight business-IT alignment you'll need to seize opportunities in the future.





For more information:

www.manageengine.com
sales@manageengine.com



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