

Hardware and Software Augmentation Procedure

**Version History**

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| --- | --- | --- | --- | --- | --- |
| **Ver.** | **Date** | **Description of Change** | **Author/ Revised By** | **Reviewed By** | **Approved By** |
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# Objectives

The purpose of this document is to detail the process through which the planning and procurement for adequate human resources, infrastructure, licenses and capacity is managed.

# Scope

This procedure is applicable to NST operations.

# Entry Criteria

Planning for capacity and availability

# Inputs

1. Projections provided by Senior Management/ HR/ Manager Infrastructure/Sales Requirements
2. Internal IT reports
3. User Change request
4. Incident/event

# Process

# 

# Planning

IT department should plan for future capacity requirements based on projections provided by Senior Management. Capacity planning should be done for:

1. Software Requirements
2. Hardware Requirements
3. Increased Bandwidth Requirements
4. Resources
5. Rack space availability in server rooms

Planning should be done keeping in mind:

1. Security requirements
2. Increase in Human Resources
3. Increase in office space
4. Customer Requirements

# Monitoring

IT department should monitor usage of current capacity and resources on basis of:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Mode of Monitoring** | **Frequency of monitoring** | **Action Taken** |
| Bandwidth Usage | Internet bandwidth utilization is done thru a tool which generates trigger when utilization exceeds 70%. For other bandwidths vendors SLA to be validated. | Internet bandwidth utilization as per the triggers. Mpls bandwidth utilization on monthly basis. | If report shows usage to be more than 70% of allocated bandwidth for continuous 7 days then it is escalated to IT Head. |
| Availability of Licenses | Licensing Inventory sheet | Yearly for Microsoft licenses.  Quarterly for other licenses (Adobe, third party tools). Reports are sent to IT head. | For Microsoft licenses, Microsoft EA subscription is renewed according to extra deployments/ requirements.  For other licenses (Adobe, third party tools), procurement is initiated by IT head. Target of this procurement is to level the difference between requirement and availability. |
| Availability of rack space in server rooms | Periodic Inspections | Quarterly | If space remaining is such that 2 servers can’t be accommodated then a new rack is ordered. Server space is planned accordingly. |
| Current workload of resources | Handover mails | Daily | If each engineer is solving more than 20 tickets each day for a fortnight then new hiring is done. |
| Software Requirements | Service Requests and PIFs | Whenever input comes PIF is referred at time of project initiation. | Requirements are handled. |
| IT Equipment Requirements | Inputs from Senior Management, Manager Infrastructure | Whenever input comes. | New equipments are purchased. |

# Replenishment of requirements

Please refer Procurement process

# Equipment disposal

1. The replacement of old computer/ hardware will be taken into account if the lease period expires. Replacement may be delayed as demanded by circumstances. In case procurement is postponed, IT Department shall arrange for maintenance contract.
2. If replacement of hardware is done then it should be properly ensured that media is properly hard formatted and there are minimum scenarios of data recovery. If software license ownership is transferred then it should be under contract.

# Receipt of Goods

Please refer to Procurement process

# Verification of Hardware and Software

IT department will install, test and deploy the augmented hardware and software as per Hardware and Software Verification Form. This form will be approved by CISO before deployment of necessary hardware and software.

# Output

1. Software License Usage Monitoring Report
2. Bandwidth Monitoring Report
3. Server Rack Space Availability Report
4. Analysis of helpdesk system
5. Escalation mails
6. Hardware and Software Verification Form

# Exit Criteria

Required action has been taken.