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| Document ID  **ITTS103** | Title  **IT SERVER / NETWORK SUPPORT** | Print Date  **mm/dd/yyyy** |
| Revision  **0.0** | Prepared By  **Preparer’s Name / Title** | Date Prepared  **mm/dd/yyyy** |
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|  | Approved By  **Final Approver’s Name / Title** | Date Approved  **mm/dd/yyyy** |

**Policy:** To ensure a secure Information Technology infrastructure, one that is properly maintained and is capable of performing in a manner that satisfies Company requirements.

**Purpose:** To ensure security and continuous availability of the Information Technology infrastructure; to provide around-the-clock support for the infrastructure and those who use it; to provide a framework for technical support of the Company’s servers and network.

**Scope:** This procedure applies to all Company servers and to the Company’s Information Technology network.

**Responsibilities:**

Information Technology Managers are responsible for assessing current support, conducting needs assessments, developing the Server / Network Support Plan, overseeing implementation of the Plan, monitoring the Plan’s progress, and updating the Plan.

The Technology Review Committee is responsible for reviewing the Plan and any updates to it and for giving final approval to the Plan.

The Server/Network Support Team is responsible for maintaining the Company’s servers and Information Technology network in accordance with the Plan and for reporting on server and network status.

**Definitions:** Multi Router Traffic Grapher (MRTG) – A tool for monitoring traffic load on network-links. MRTG generates HTML pages containing graphical images, which provide a live visual representation of this traffic.

**Procedure:**

1. **SERVER / NETWORK SUPPORT PLANNING**
   1. Information Technology Managers shall conduct an assessment of the current server and network support capabilities by reviewing and analyzing the following, at a minimum:
      * ITAM102-5 IT ASSET INVENTORY DATABASE;
      * ITAM102-6 IT NETWORK MAP;
      * ITTS103-1 SERVER/NETWORK PLANNING CHECKLIST; and
      * Various server and network logs (activity, performance, etc.).
   2. Information Technology Managers shall similarly conduct a needs assessment by reviewing and analyzing the following, at a minimum:
      * ITAD101-1 INFORMATION TECHNOLOGY PLAN;
      * Information Technology industry standards, best practices, and technology trends; and
      * ITAD110-2 USER SATISFACTION SURVEY.
   3. Information Technology Managers shall develop a gap analysis, to determine the Company’s short- and long-term requirements with regard to resources, training, capacity, budget, etc.
   4. Information Technology Managers shall develop the Server/Network Support Plan, including budget requirements, and submit it to the Technology Review Committee for review and recommendations.
   5. Information Technology Managers shall incorporate recommended changes, if any, into the Plan and present the revised plan to the Committee for final approval. Information Technology Managers shall oversee implementation of the Plan and monitor, evaluate, and report on its progress.
2. **SERVER / NETWORK SUPPORT PLAN**
   1. A Server and Network Support team shall be responsible for supporting servers and the Information Technology network infrastructure, in accordance with ITTS103-2 SERVER/NETWORK SUPPORT PLAN. Server and network support functions may reside entirely in-house and some or all functions may be outsourced, in accordance with ITAD109 IT OUTSOURCING.
   2. The Server/Network Support team shall be responsible for:
   * Server and network design;
   * Testing, installation, and configuration of hardware and software;
   * Daily operations (administration) of servers and the network; and
   * Maintenance, repair, and service

in accordance with ITTS103-2 SERVER/NETWORK SUPPORT PLAN.

* 1. The Server/Network Support team shall regularly and frequently (weekly, at a minimum) submit a report to Information Technology Managers on the status of the Company servers and network, for review.
  2. The Server/Network Support team shall manage servers and the network in accordance with Service Level Agreements set forth in the Plan.

1. **SERVER/NETWORK SUPPORT PLAN REVIEW**
   1. The Server/Network Support Team shall periodically (monthly, at a minimum) review logs and other records generated in the course of managing the Company network and servers and report server and network statistics, as well as any findings and observations, to Information Technology Managers for review.
   2. Information Technology Managers shall periodically review (quarterly, at a minimum) the Server/Network Support Plan to determine if the Plan is being properly implemented (adhered to) and if Plan management conforms to Company requirements. Information Technology Managers shall report its findings and recommendations to the Technology Review Committee.
   3. A third-party audit of the Plan shall be conducted at regular intervals (at least once every two years), to verify that the Plan is properly documented and communicated to the appropriate parties; is being implemented in a manner that conforms to Company requirements; and is being monitored and measured, to determine if it is in need of change.
2. **SERVER / NETWORK SUPPORT PLAN UPDATE**
   1. Information Technology Managers shall update (make revisions to) the Server/ Network Support Plan, as needed, and communicate the revised Plan to the Server/Network Support Team.
   2. Within one month of implementing the revised Plan, the Technology Review Committee shall review server and network activity logs (and server/network related documentation, if necessary) of the last month to ensure that the revised Plan has been properly implemented and is yielding the desired results.

**Forms:**

* ITTS103-1 SERVER/NETWORK PLANNING CHECKLIST
* ITTS103-2 SERVER/NETWORK SUPPORT PLAN

**References:**

**ISO 27002:2013, “INFORMATION TECHNOLOGY - CODE OF PRACTICE FOR INFORMATION SECURITY MANAGEMENT”**

<http://www.iso.org/iso/home/store/catalogue_ics/catalogue_detail.htm?csnumber=54533>.

**Additional Resources:**

**SARBANES-OXLEY ACT OF 2002**

Sarbanes-Oxley, or SOX, passed by the U.S. Congress in 2002 was designed to create a new standard of corporate accountability and new penalties for corporate wrongdoing. SOX holds public companies’ executive officers responsible for financial reporting, it mandates internal control processes, and it outlaws alteration or destruction of financial records. Because virtually all companies use Information Technology networks to share information (including sensitive financial data), effective network management is crucial to SOX compliance.

**Revision History:**

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| **Revision** | **Date** | **Description of Changes** | **Requested By** |
| 0.0 | mm/dd/yyyy | Initial Release |  |
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**ITTS103-1 SERVER/NETWORK PLANNING CHECKLIST**

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| **1. SERVERS** |  |
| Does the Company currently have a server inventory? |  |
| How often does the Company review server deployment? |  |
| Server operating system choices are based on…? (List reasons.) |  |
| As a percentage, how much of server administration time is allocated to routine server maintenance? |  |
| How many servers does the Company currently have? |  |
| What is the Company’s employee-to-server ratio? |  |
| Are all servers uniquely configured for a specific business function or are they multipurpose? |  |
| Does the Company have a standard hardware and software build for new servers? |  |
| Who supports Company servers? |  |
| Does the Company have a server management plan? |  |
| Does the Company have a roadmap for server deployment? |  |
|  |  |
| **2. INTERNAL NETWORK (LAN)** |  |
| Does the Company periodically experience degraded internal network performance? |  |
| If so, how often? |  |
| Does the Company currently have an inventory or map of the Company’s internal network? |  |
| How often is the Company’s network inventoried? |  |
| Does the Company have a network management plan to clarify day-to-day operational responsibilities? |  |
| How often does the Company review its network implementation? |  |
| Does the Company have a roadmap for long-term planning of its internal network? |  |
| How often does the Company engage in long-term network planning? |  |
| Acquisition of hardware, software, or services for the internal network are based on…? (List reasons.) |  |
| As a percentage, how much network administration time is allocated to routine LAN maintenance? |  |
| Who supports the internal network? |  |
| Does the Company use MRTG-based tools to analyze network performance? |  |

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| **3. EXTERNAL NETWORK (WAN)** |  |
| How does the Company currently connect to the Internet? |  |
| How often does the Company experience degraded external network performance? |  |
| Does the Company currently have an inventory or map of its external network configuration? |  |
| How often does the Company review its inventory? |  |
| If there is a network management plan, does it include external connections? |  |
| How often does the Company review the external networking components of its network management plan? |  |
| Does the Company have a roadmap for its external network? |  |
| How often does the Company engage in updating its roadmap? |  |
| Acquisition of hardware, software, or services related to the external network are based on…? (List reasons.) |  |
| As a percentage, how much network administration time is allocated to routine maintenance of the WAN? |  |
| Who supports the external network? |  |
| Does the Company conduct bandwidth analysis to ensure its external connection is optimally utilized? |  |

**ITTS103-2 SERVER/NETWORK SUPPORT PLAN**

1. **SERVER SUPPORT**

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| --- | --- |
| 1.1 Server planning and design |  |
| * Network mapping |  |
| * Load planning |  |
| 1.2 Server testing, installation, and configuration |  |
| 1.3 Operations / Administration |  |
| * Monitor server usage (traffic), disk usage |  |
| * Conduct performance testing (maintain performance logs), performance tuning (optimization) |  |
| * Monitor server security (provide anti-malware defense, server backup, vulnerability tests, penetration tests, disaster recovery, etc.) |  |
| * Provide server hardware and software license tracking |  |
| * Server updates (hardware / software) – method, timing, frequency, testing & installation |  |
| * Report on server traffic, disk usage, server-related incidents, etc. |  |
| * Service Level Agreements (frequency, extent of reporting, conducting operations/admin tasks) |  |
| 1.4 Service / Maintenance / Repair |  |
| * Help Desk (remote or local, remote/live/web-based support, extent of coverage, support logs, etc.) |  |
| * Troubleshooting server(s) |  |
| * Emergency support |  |
| * Service level agreements (SLAs) |  |

1. **NETWORK SUPPORT**

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| --- | --- |
| 2.1 Network planning and design |  |
| * Network mapping |  |
| * Load planning |  |
| 2.2 Network testing, installation, and configuration |  |
| 2.3 Operations (admin) |  |
| * Create and manage network users, groups |  |
| * Monitor network traffic (bandwidth usage, etc.) |  |
| * Conduct network performance testing |  |
| * Monitor network security (provide firewalls, disaster recovery, vulnerability testing, etc.) |  |
| * Provide network hardware and related software license tracking |  |
| * Network updates (hardware/software – method, timing, testing & installation) |  |
| * Report on network traffic, usage, bottlenecks, network incidents, etc. |  |
| * Service Level Agreements (frequency, extent of reporting, operations/admin tasks, etc.) |  |
| 2.4 Service / Maintenance / Repair |  |
| * Help Desk |  |
| * Troubleshooting |  |
| * Emergency support |  |
| * Service level agreements (SLAs) |  |

**Approval**

Technology Review Committee: Date:

IT Management: Date:

Support Team leader: Date: