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| Document ID  **ITTS101** | Title  **IT SYSTEMS ADMINISTRATION** | Print Date  **mm/dd/yyyy** |
| Revision  **0.0** | Prepared By  **Preparer’s Name / Title** | Date Prepared  **mm/dd/yyyy** |
| Effective Date  **mm/dd/yyyy** | Reviewed By  **Reviewer’s Name / Title** | Date Reviewed  **mm/dd/yyyy** |
|  | Approved By  **Final Approver’s Name / Title** | Date Approved  **mm/dd/yyyy** |

**Policy:** To administer the Company’s Information Technology systems in a way that promotes the achievement of Company goals and objectives.

**Purpose:** To delineate the System Administrator’s tasks and responsibilities; to set up a mechanism for reviewing and updating sys admin responsibilities, as needed.

**Scope:** This procedure applies to all Company Information Technology systems.

**Responsibilities:**

The Information Technology Systems Administrator is responsible for managing the day-to-day operation of the Company’s computer (Information Technology) systems.

Information Technology Managers are responsible for reviewing and approving the Company’s System Administration Plan and ensuring its proper implementation.

**Definitions:** System Administrator – One whose primary job function is managing computer and network systems on behalf of another, such as an employer or client. Depending on the size of the organization, there may be several system administrators working on subsystems, reporting to an overall system administrator.

**System administration** – Activities that directly support the operation and integrity of computing systems, their use, and their intricacies. System administration activities may include but are not limited to: system installation, configuration, integration, maintenance, performance management, data management, security management, failure analysis and recovery, and user support. System administration is commonly known as “Sys Admin.”

**Procedure:**

1. **PLANNING SYSTEM ADMINISTRATION**
   1. The System Administrator shall conduct an assessment of the Company’s current system administration (i.e., determine if it is doing the right things and how well it is doing them) by:
      * Reviewing user satisfaction surveys (see ITAD110 IT DEPARTMENT SATISFACTION); and
      * Reviewing system usage (reports based on various logs), to determine patterns, trends, and requirements.
   2. The System Administrator shall determine the Company’s requirements by reviewing, analyzing, and incorporating information from:
      * Information Technology industry standards, best practices, and technology trends;
      * Legal/regulatory issues pertaining to system administration; and
      * Business issues, requirements, and trends.
   3. The System Administrator shall develop a System Administration Plan and submit the Plan to Information Technology Managers for review and comments.
   4. The System Administrator shall incorporate comments and suggestions from Information Technology Managers into the Plan and submit the revised Plan to Information Technology Managers for another review and final approval.
   5. Upon final approval, the System Administrator shall implement the Plan.
2. **SYSTEM ADMINISTRATION PLAN**
   1. The System Administrator shall manage the day-to-day operation of the Company’s computer, or Information Technology, systems. The particular tasks for which the System Administrator is responsible shall be documented, using ITTS101-1 SYSTEM ADMINISTRATION TASK LIST as a guide.
   2. The System Administrator shall regularly monitor, review, and report to Information Technology Managers on administration activities and on the status of the Company’s Information Technology systems.
3. **SYSTEM ADMINISTRATION PLAN REVIEW**
   1. The System Administrator shall periodically (monthly, at a minimum; weekly is advisable) review logs and other records generated in the course of implementing the Plan and report findings and observations to Information Technology Managers for review. Information Technology Managers shall review these findings and observations and recommend changes to the Plan, as needed.
   2. Information Technology Managers should periodically (every six months is recommended) initiate a review of system administration, to determine if there is additional information not included in the periodic reports (referenced in 3.1) that may indicate or suggest that the Sys Admin Plan is or is not adequate.
   3. A third-party audit of the System Administration Plan should be conducted at regular intervals (every two years, at a minimum). The auditor shall verify that the Plan is properly documented and implemented, that it meets Company requirements, and that it is continually monitored and measured for the purpose of improvement.
4. **SYSTEM ADMINISTRATION PLAN UPDATE**
   1. The System Administrator shall revise the System Administration Plan, as directed, and notify the appropriate reviewer (auditor) that the Plan has been revised and implemented.
   2. Within a month of the revised Plan being implemented, the third-party auditor or other reviewer shall verify that the revised Plan has been documented, implemented, and is yielding the expected results.

**Forms:**

* ITTS101-1 SYSTEM ADMINISTRATION TASK LIST

**References:**

None.

**Additional Resources:**

1. System Administrators’ Group (SAGE) is a subgroup of the USENIX (or Advanced Computing Systems) Association and includes among its primary goals “to advance the status of computer system administration as a profession, establish standards of professional excellence and recognize those who attain them, develop guidelines for improving the technical and managerial capabilities of members of the profession, and promote activities that advance the state of the art of the community.” Visit <http://www.sage.org/> for more information.
2. Microsoft’s TechNet provides some insight into the subject of system administration. One online document, “Service Management Functions – System Administration” – a good resource – is located at: <http://technet.microsoft.com/library/cc506049.aspx>.
3. The Sys Admin online journal (<http://www.samag.com/>) contains tips and advice for Unix and Linux system administrators.

**Revision History:**

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| **Revision** | **Date** | **Description of Changes** | **Requested By** |
| 0 | mm/dd/yyyy | Initial Release |  |
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**ITTS101-1 SYSTEM ADMINISTRATION TASK LIST**

| **Administrative Task** | **Frequency** |
| --- | --- |
| Print services |  |
| * Set up printers (see ITAM101) |  |
| * Administer printers, print servers |  |
| System hardware |  |
| * Installation/disposal (see ITAM101, ITAM102) |  |
| * Configuration |  |
| * Maintenance/repair (see ITTS103) |  |
| System software |  |
| * Install/uninstall (see ITAM101) |  |
| * Configuration |  |
| * Patches and other updates (see ITSD102, ITSD105) |  |
| * License management (see ITSD102, ITTS102, ITTS103) |  |
| System resources |  |
| * Monitor system performance (see ITTS102, ITTS103) |  |
| * Track resource usage; manage storage space (see ITSD102, ITSD103) |  |
| * Data backup and recovery (see ITSD104) |  |
| * Manage system processes |  |
| * Manage operating systems |  |
| User profiles (see ITSD106, ITSD107) |  |
| System troubleshooting (see ITTS104) |  |
| System accounting |  |
| Change management |  |
| Centralized/decentralized systems |  |
| Data center |  |
| * Databases |  |
| * System hardware, software |  |
| * Configuration, tuning |  |
| Networks (see ITTS103) |  |
| * Topology |  |
| * Protocols |  |
| * Hardware, software management |  |
| User services |  |
| * E-mail, messaging management |  |
| * Password management (see ITSD106) |  |
| * Other |  |
| Scheduling system tasks |  |
| Access control (see ITSD106) |  |
| Security (see ITSD102) |  |
| * Antivirus software management (see ITSD105) |  |
| * Firewall management |  |
| * Intrusion detection |  |
| * Other |  |
| System documentation (see ITAD103) |  |
| Remote access |  |
| * Methods |  |
| * Standards |  |
| * Hardware, configuration |  |