

## **Minds + Machines Staff**

### **I. Corporate**

#### **Chief Executive Officer (CEO)**

Executive in charge of total management of the organization. Has responsibilities as a communicator, decision maker, leader and manager. The communicator role involves the press and the rest of the outside world as well as the organization's management and employees; the decision-making role involves high-level decisions about policy and strategy. Advises the board of directors of the parent company, motivates employees and drives change within the organization. Presides over the organization's day-to-day, month-to-month and year-to-year operations. Reports to the Board of Directors.

#### **Chief Financial Officer (CFO)**

Executive primarily responsible for managing the financial risks of the corporation. Responsible for financial planning and record-keeping, as well as financial reporting to the CEO and Board of the parent company. Responsible for data analysis and ensuring compliance with appropriate financial laws and regulations. Oversees the operations of the accounting department, including the design of an organizational structure adequate for achieving the department's goals and objectives. Reports to the CEO.

#### **Vice President for Corporate Development**

Responsible for understanding the competitive dynamics of the industry, recognizing new opportunities, developing new business initiatives and implementing corporate and business-level strategies for the company. Works with the executive team to develop corporate and business level strategies and to communicate key positioning and performance metrics to strategic constituencies. Reports to the CEO

#### **Controller**

Responsible for the accounting operations of the company, including the production of periodic financial reports and maintenance of an adequate system of accounting records. In charge of a comprehensive set of controls and budgets designed to mitigate risk, enhance the accuracy of the company's reported financial results and ensure that reported results comply with generally accepted accounting principles or international financial reporting standards. Duties include: maintaining a documented system of accounting policies and procedures; managing outsourced functions; day-to-day accounting needs of the TLD operation; payroll and benefits, registrar accounts and accounts payable. Reports to the CFO.

### **II. Legal**

#### **Vice President for Policy**

Maintains knowledge of ICANN's (and other pertinent governing bodies') policies and activities. Represents the company at industry events. Responsible for external affairs and developing

advocacy and policy strategy for advancing the company's goals. Manages abuse complaint intake and rights protection mechanisms. Reports to the CEO.

### **Director Legal Affairs**

Provides management with effective legal advice on business issues and company strategies; selects and oversees the work of outside counsel; drafts and edits complex agreements; ensures that the company operates in compliance with applicable laws and regulations, including ICANN specifications, consensus policies and RFCs; helps prepare briefs, complaints, motions and other court documents. Other tasks may include advising the human resources department on employment law and labor and benefit issues; drafting and negotiating contracts and agreements; and providing litigation support. Oversees Compliance Administrator. Reports to the CEO.

### **Compliance Administrator**

The Compliance Administrator works with the Director of Legal Affairs and the Vice President for Policy to design and implement programs, policies and practices to ensure that all business units are in compliance with federal, state and local regulatory requirements, as well as ICANN specifications and consensus policies. Ensures compliance with relevant RFCs and local privacy policies. Tracks laws and regulations that might affect the organization's policies. Prepares compliance reports to present to management. The Compliance Administrator is the Designated Abuse Point of Contact for the Registry. Reports to the Director of Legal Affairs.

## **III. Technical**

The technical team includes staff with expertise in the following areas:

- \* Software development
- \* Quality Assurance
- \* Information Security
- \* Networking
- \* Systems Administration
- \* Database Administration
- \* Data Warehousing
- \* Website management
- \* Operations monitoring

### **Chief Technical Officer (CTO)**

The CTO is the executive responsible for the technical operations of the SRS and for overseeing technical staff. Oversees technical team. Oversees ongoing registry technical operations. Collaborates with the information security officer enforces security policies. Ensures compliance with best practice standards such as iso, ietf and icann consensus policies regarding registry operations. Seeks system certifications, ensures technical policies and procedures are enforced. Ensures compliance with right protection mechanisms and abuse mitigation policies at the technical level. Acts as technical Abuse Point of Contact. Responsible for selection of hardware and software for registry operations. Oversees testing procedures including regular failover testing. Reports to the CEO.

### **Information Security Officer (ISO)**

The Information Security Officer is responsible for identifying, developing, implementing and maintaining processes across the organization to reduce information and information technology risks. Also responds to incidents, establishes appropriate standards and controls and directs the establishment and implementation of policies and procedures. The ISO is responsible for information-related compliance and ensures security policies are kept up-to-date and followed by staff. Reports to the CTO.

### **Network Operations Manager**

Manages network operations and network management systems and maintains the system architecture once established. Maintains computer hardware and network infrastructure for the registry. Oversees system administration functions, hardware configurations, Virtual Private Network, firewall and load balancer rules. Responsible for maintaining secondary failover connectivity and database backup architecture, all network connectivity and backup power supply. Identifies potential issues with computer systems. Introduces and integrates new technologies into existing data center environments. Performs routine audits of systems and software. Answer technical queries at tier three levels. Responsible for security. Responsible for documenting the configuration of the system. Troubleshoots any tier three problems. Performs system performance tuning. Maintains the standards for server installations and applications. Manages security alerts and security incidents. Ensures best practices for data management. Reports to the CTO.

### **Network Engineer 1**

The Network Engineer manages all aspects of network engineering and maintains computer hardware and network infrastructure for the registry. Performs system administration functions, maintains and updates switch configurations, Virtual Private Network, firewall and load balancer rules. Responsible for maintaining secondary failover connectivity, all network connectivity and backup power supply. Monitors hardware systems for health, troubleshoot errors, initiates backup hardware and installs new hardware as necessary. Analyzes system logs and identifies potential issues with computer systems. Introduces and integrates new technologies into existing data center environments. Performs routine audits of systems and software. Performs backups. Applies operating system updates, patches and configuration changes. Installs and configures new hardware and software. Adds, removes, or updates user ssh, sftp, account information, reset passwords, etc. Answers technical queries at tier three levels. Manages security. Documents the configuration of the system. Troubleshoots any reported problems. Responsible for system performance tuning. Ensures network infrastructure is up and running. Ensures licenses are paid for and up to date. Maintains the standards for server installations and applications. Performs Security Alerts Management. Performs Security incident management. Checks for security breaches. Ensures best practices for data management. Reports to the Network Operations Manager.

### **Network Engineer 2, Network Engineer 3**

Implements tasks assigned by senior technical management including: internal LAN, monitoring, troubleshooting and technical Help Desk management. Responsible for keeping the registry system functioning smoothly. Works with the remaining technical staff to provide 24-hour coverage. In addition to sharing on-call duties in case of an emergency or other urgent need, the

network engineers bring skills that ensure efficient and secure operation of the NOC. Reports to the Network Operations Manager.

### **Espresso Application Developer (SRS, EPP)**

Manages all duties relating to the application (software) layer. Responsible for compliance with ICANN/IETF system requirements. Develops the EPP schema Oversees system/storage administration, database operations and synchronization. Responsible for development and maintenance of technical support for rights protection mechanisms and abuse prevention and mitigation. Monitors health of application systems, troubleshoots errors, keeps applications up to date, installs replacement software as necessary. Installs and upgrades the SRS systems and application tools. Allocates system processing and storage and plans future requirements. Creates primary storage structures. Maintains and adds primary objects. Develops and modifies the database structure to keep with best practice. Enrolls users and maintains system security. Ensures compliance with vendor license agreement. Monitors and optimizes the performance of the SRS. Plans for backup and recovery of database information. Maintains archived data. Backs up and restores the database. Contacts external vendors for technical support. Reports to the CTO.

### **Espresso Application Developer 2, Espresso Application Developer 3**

Supports the Senior platform developer. Installs and upgrades the SRS systems and application tools. Allocates system processing and storage and plan future requirements. Creates primary storage structures. Maintains and adds primary objects. Develops and modifies the database structure to keep with best practice. Enrolls users and maintains system security. Ensures compliance with vendor license agreement. Monitors and optimizes the performance of the SRS. Plans for backup and recovery of database information. Maintains archived data. Backs up and restores the database. Contacts external vendors for technical support. Reports to the CTO.

### **Database Developer 1**

Works under the Network Engineer(s). Writes and modifies databases to ICANN's specifications. Ensures health of registry databases, including backup and redundancies. Develops and modifies the data base structures to comply with best practices as set by Network Engineer(s). Defines system requirements by consulting data administrators and system users about the types of information needed. Determines how data should be organized, who should have access to different data and how it should be displayed. Designs and develops data models and database architecture. Constructs, installs and tests the database system. Write manuals or explain database's function. Consults with others to assess the system performance and make modifications as required. Modifies existing databases, as user needs change. Finds faults in programs. Prepares reports on databases. Customizes databases for specific needs. Trains users and provides technical support. Reports to the CTO.

### **Database Developer 2**

Works under the Network Engineer(s). Writes and modifies databases to ICANN's specifications. Ensures health of registry databases, including backup and redundancies. Develops and modifies the data base structures to comply with best practices as set by Network Engineer(s). Reports to the CTO.

### **Database Administrator 1**

Works under the Network Engineer(s). Modifies databases to ICANN's specifications. Ensures ongoing health of registry databases, including backup and redundancies. Modifies the data base structures to comply with best practices as set by Network Engineer(s). Installing and upgrading the database server and application tools. Allocating system storage and planning future storage requirements for the database system. Creating primary database storage structures (tables) after application developers have designed an application. Creating primary objects (tables, views, indexes) once application developers have designed an application. Modifying the database structure, as necessary, from information given by application developers. Enrolling users and maintaining system security. Ensuring compliance with database vendor license agreement. Controlling and monitoring user access to the database. Monitoring and optimizing the performance of the database. Planning for backup and recovery of database information. Maintaining archived data on tape. Backing up and restoring the database. Contacting database vendor for technical support. Reports to the CTO.

### **Database Administrator 2**

Works under the Network Engineer(s). Modifies databases to ICANN's specifications. Ensures ongoing health of registry databases, including backup and redundancies. Modifies the data base structures to comply with best practices as set by Network Engineer(s). Reports to the CTO.

### **Registrar Customer Service - Technical 1**

The technical Registrar Customer Service responds to technical Help Desk inquiries and is the first line to address any technical issues raised by Registrars. The Registrar Customer Service Technical staff assists Registrars with connectivity, application use issues and escalates issues to senior staff according to tiered escalation procedures. Reports to the CTO.

### **Registrar Customer Service - Technical 2**

The technical Registrar Customer Service staff responds to technical trouble tickets and are the first line to address any technical issues raised by Registrars. The Registrar Customer Service Technical staff assists Registrars with connectivity, application use issues and escalates issues to senior staff according to tiered escalation procedures. Reports to the CTO.

## **IV. Client and Customer Support Services**

### **Vice President for Client Services**

The VP of Client Services is the epicenter for client activity. Manages key client relationships and consults with clients and Minds + Machines to develop joint strategies. Coordinates with other staff within the organization to ensure that client goals are achieved. Works with the client initially for planning, policy creation and reporting; during the start-up phase, will be primarily tasked with coordinating the various marketing and public relations launch efforts; finally, during steady-state operations, functions as the primary link between the Client and Minds + Machines. The VP of Client Services has excellent communication skills, both written and oral; an ability to think analytically; a grounding in the domain name industry; and the ability to handle high-pressure projects. Has strong project management experience. Has responsibility for keeping Minds + Machines aware of the priorities of the client and the relevant stakeholders on

an ongoing basis and assisting the client with getting any support needed from Minds + Machines. Reports directly to the CEO.

### **Registrar Liaison**

Responsible for managing Registrar accounts. Is the main contact between the Registrar and the company. Ensures Registrar satisfaction; performs on-site reports to the Registrar. Acts as the main point of contact with ICANN-accredited registrars. Manages extensive networks within the domain name industry. The Registrar Liaison travels frequently to visit registrars and update them on new programs, provide them with sales incentives, review and improve their promotion of the TLD. The Registrar Liaison will attend ICANN meeting and registrar conferences and trade shows and often act as the registry's ambassador at industry gatherings. Has overall responsibility for promoting the TLD to ICANN-accredited registrars. Reports to the CMO.

### **Registrar Customer Service - Administrative 1, Registrar Customer Service - Administrative 2**

Assists Registrars with billing and other administrative issues. Escalates issues to senior staff according to tiered escalation procedures. Handles day-to-day registrar interactions, including assisting them with questions about their accounts, particular transactions, helping them use the Espresso registry accounting functions and answering questions about ongoing promotions and pricing. Responsible for escalating any issues as required by service-level agreements. Registrar Customer Service Representatives will have been senior customer service representatives in an organization of equivalent or greater size, reliable, with excellent communication skills. The Registrar Customer Service Representatives will report to the Marketing Director, but will also have direct lines to the CTO and CFO where the issue they are handling warrants it. Reports to the CMO.

## **V. Marketing and Public Relations**

### **Chief Marketing Officer (CMO)**

Executive responsible for marketing activities. Responsible for areas such as sales management, product development, distribution channel management, marketing communications (including advertising and promotions), pricing, market research and customer service. Responsible for facilitating growth, sales and marketing strategy, revenue generation, cost reduction and risk mitigation. Reports to the CEO.

### **Marketing Manager**

Along with the CMO, develops, establishes and maintains marketing strategies to meet company objectives. Manages and coordinate marketing, advertising and promotional. Conducts market research to determine market requirements for existing and future products. Develops and implements marketing plans and projects for new and existing products. Manages the productivity of the marketing plans and projects. Monitors, reviews and reports on all marketing activity and results. Liaises with media and advertising. The Marketing Manager is responsible for marketing tasks assigned to them by the CMO. Reports to the Marketing Manager. Reports to the CMO.

### **Public Relations Associate**

Works closely with the Vice President of Policy (VPP) and CMO to manage public relations and fulfill client needs. Ensures smooth running of the division in daily tasks and as it relates to the entire agency. Tasks will include database management, PowerPoint presentations, press kit assembly and distribution and general administrative duties. May help purchase advertising space and attend trade shows. Reports to the CMO.

## **VI. Business Functions**

### **IT Support Specialist**

Provides technical assistance internally. Provides support and technical issue resolution via email, phone and other electronic media. Configures hardware and software. Provides training in the use of system and applications. Must have general understanding of operating systems and application operations. Identifies and corrects or advises regarding operational issues in computer systems. Creates new accounts as needed. Other duties may be assigned as required. The IT Support Specialist will be responsible for making sure that the technology used by the office is working such that the staff are productive and efficient. Responsible for making sure that all the staff have compatible software on their computers and that the printers, scanners, routers and other office equipment function properly. The ITSS will also be responsible for the office network speed, reliability and security. In addition, the ITSS will be responsible for handling email servers and the email accounts of staff. The ITSS will have at least 3 years equivalent experience and software certifications will be viewed favorably. The ITSS will report to the CTO.

### **Executive Assistant**

Is responsible for calendar management, requiring interaction with both internal and external staff to coordinate a variety of complex executive meetings. Answers phones and directs all incoming calls to the appropriate party promptly and efficiently. May handle electronic communications on behalf of the executive management. Assists executive management with preparation of presentation materials. Reviews and summarizes miscellaneous reports and documents; prepares background documents and outgoing mail as necessary. Prioritizes and manages multiple projects simultaneously. Arranges travel schedule and reservations for executive management as needed. Reports to the CEO.

### **Office Manager**

Responsible for organizing and coordinating office operations and procedures in order to ensure organizational effectiveness and efficiency. Oversees all clerical aspects of the office, including purchasing, bookkeeping, human resources, printing, records management, office budget and facilities management. Liaises between employees and Controller regarding payroll and bookkeeping. Plans and manages office location moves and openings. Responsible for the day-to-day running of the office. Reports to the CEO.

## **VII. Outsourced**

**Network Architect**

Initial system architecture design and build is done by an expert Network Architect. This person leads architecture and design efforts for the organization, provides technical and architectural direction to application teams coordinates within the organization to create registry engineering tools necessary to ensure successful build and implementation of the Registry, promotes shared infrastructure and applications to improve information flows, enhance technical integration and reduce costs.

**Ombudsperson**

This person is a neutral third-party specialist who will provide informal arms-length mediation and adjudication of any complaints of alleged registrant abuses and violations of the AUP. This person provides mediation services to domain registrants and complainants, receives complaints for which the parties have agreed to attempt to resolve the conflict via mediation--typically before legal action is taken. This person reviews the complaint, researches similar cases, reviews policies for the TLD and makes a non-binding determination. Parties may accept the determination or proceed with legal action such as the Uniform Dispute Resolution Process (UDRP).



## **Tucows (Secondary Failover Facility) Staff**

Tucows employs four Senior Technical Support Specialists who have an elevated understanding of the systems and the various individual customers and custom configurations as well as the ability to perform deep diagnostics using elevated read-only access to systems.

There are eight fulltime Monitoring Analysts with a mix of Senior and Junior levels. These Monitoring Analysts work in a modified 24-hour, 4-week schedule in 8-hour shifts with overlaps maintaining a full 24-hour/365-days a year coverage. In addition to maintaining 24-hour coverage, the Monitoring Analysts' core responsibility is to view system health and react to alerts and early warning signs to address issues before they become service-impacting. When issues arise, Monitoring Analysts attempt to correct the issues. If this fails, it is their responsibility to escalate to the appropriate technical on-call teams.

Tucows employs nine Systems Administrators with a mix of Senior, Junior and Team Leads levels. Systems Administrators work a mix of office hours from 6am to 6pm EST. Systems Administrators share pager duty and respond within 15 minutes of being paged by Monitoring Analysts to address technical issues relating to network infrastructure, firewall, load balancer, IP networking, server and storage infrastructure to operating systems and all Tucows-developed software. Network Engineers work within the Systems Administrators' team and are responsible for all network infrastructure and IP Internetworking.

Tucows employs two dedicated Security Specialists responsible for addressing and preventing abuse-related issues including domain hijacking, credit card fraud, messaging abuse, domain abuse, DoS/DDoS as well as putting in procedures and processes to address various security auditing and compliance best practices.

The Operations Manager is the next point of escalation and is responsible for all Systems Administrator staff including Networking staff.

The Director of IT Security & Compliance is responsible for all Monitoring Analysts and Security Specialists and is the next point of escalation. The Operations Manager rotates escalation coverage with the Director of IT Security and Compliance.

The Vice President of IT Operations is responsible for all IT Operations and is the last point of escalation.