Request For Proposal (RFP)
Issued by
FIRST.Org, Inc.

INFRASTRUCTURE TECHNOLOGY SERVICES

Submittal Deadline: ~~November 6, 2015~~
Extended to November 20th, 2015

INTRODUCTION

FIRST.Org, Inc. (FIRST) is a recognized global leader in computer network incident response and security. Membership in FIRST enables incident response teams to more effectively respond to security incidents by providing access to best practices, tools, and trusted communication with member teams. FIRST is a nonprofit membership of over 300 member teams from over 60 nations. FIRST.Org Inc. is a U.S. nonprofit corporation and is recognized by the U.S. Internal Revenue Service as a 501(c)(3)tax-exempt organization.

FIRST's Mission Statement

- FIRST is an international membership of trusted computer incident response teams who cooperatively handle computer security incidents and promote incident prevention programs.

- FIRST members develop and share technical information, tools, methodologies, processes and best practices

- FIRST encourages and promotes the development of quality security education, products, policies & services

- FIRST develops and promulgates best computer security practices

- FIRST promotes the creation and expansion of Incident Response teams and membership from organizations from around the world

- FIRST members use their combined knowledge, skills and experience to promote a safer and more secure global electronic environment.

SECTION 1 RFP PURPOSE

The purpose of this RFP is to solicit proposals from interested parties to provide UNIX and Windows system administration services for FIRST's infrastructure.

The high level goal of the resulting contract will be to assist FIRST Technology leadership in:

a) Gaining a better understanding of the technical maturity of FIRST's existing deployed software and hardware ecosystem; and to
b) Provide recommendations on technical changes which FIRST should undergo to better meet industry security best practices, standards and to meet the expectations of our members;
c) Perform maintenance of FIRST infrastructure assets, including patch assessment, deployment and management, and regular software upgrades;
d) Manage the security of FIRST systems and provide regular security assessment to comply with applicable compliance regimes;
e) Provide technical system administration and development services to meet FIRST's business goals, as well as integrate and manage any existing FIRST systems.

Section 2 Contractor's Responsibilities and Requirements

The Contractor's responsibilities in performance of this requirement include:

- Develop a plan to build a comprehensive list of services and functionality running on FIRST existing Information Technology infrastructure
- Execute this plan with FIRST technology leadership and existing vendors:
    - Identify and describe all existing hardware and software services provided within the existing Information Technology infrastructure;
    - Given access to each system, review existing hardware and software configuration to identify:
        - Overly complex setups which would benefit from a reduction in complexity or which duplicate efforts or data
        - Configuration weaknesses, both from a security and stability perspective;
        - Issues which may affect scalability, or systems which may be scaled inappropriately.

- o Develop a technology register, including software deployed, software versions and the maturity of the deployment;
  - o Develop a comprehensive network diagram that represents both individual services and interdependencies across services.
- Develop a prioritized list of technology recommendations for FIRST that will assist FIRST technology leadership in defining our strategic technology roadmap.
- Show how these technology recommendations would allow FIRST.org to better follow best current practices in the future
- Develop a transition plan to these proposed technology recommendation that respects availability and security of FIRST ongoing daily business processes;
- Execute on the transition plan;
- Manage and perform system administration on all FIRST services, including regular patch management, but also manage and onboard new services as requested through additional work orders.

High Level Requirements

Participating contractors must have the following capabilities and skills:

- Strong system administration skills on Windows, Ubuntu Linux, Red Hat Linux (minimum of 5 years experience);
- Experience in the deployment and configuration of third party virtual hosting services;
- Experience with devops automation cycles (for example with tools such as puppet, chef, vagrant);
- Experience with monitoring solutions;
- Strong understanding of security concerns and awareness of best practices in secure configuration of services (especially patch management cycle)
- Proven ability to develop strategic recommendations in the deployment of Information Technology in a business, particularly a technology oriented non-profit which supports numerous technical services:
  - o Cloud hosted Linux
  - o VPNs,
  - o Webservers (nginx, Apache),
  - o Mail servers and mailing lists,
  - o spam filters,
  - o Databases (Mysql)
  - o web programming frameworks (Symfony),
  - o shell scripts, python Perl and PHP.
  - o IRC,
  - o DNS implementations, such as Bind,
  - o encrypted e-mail
  - o lightweight Certificate Authority infrastructure.

- A willingness to document meticulously (as concise as possible as complete as necessary).
- A willingness to work within a ticket tracker system
- A love for simple, elegant solutions which avoid complexity

Specific Technical Services

FIRST provides to its membership a wide variety of technical services to facilitate and drive the mission of FIRST. The contractor is tasked with overseeing all infrastructure services provided on a voluntary or contract basis to FIRST and shall assist in maintaining their relationship with the FIRST Membership and the FIRST.Org Inc. Board of Directors.

Domain name service

FIRST operates the first.org domain. The service provider must maintain DNS servers as well as its zone file for FIRST.org on our VMs/servers. We anticipate running DNSSEC for the Domain first.org in the future. We prefer to run BIND as a DNS server solution.

Requirements

- Operate redundant DNS servers on VMs/servers run by FIRST
- Maintain Zone File in a timely manner
- Provide for DKIM/SPF records for the mail server
- Monitor DNS availability and react to alarms
- DNSSEC
- Hosting Master and Slave in to independent locations
- Preferably with BIND

Web services offering

Contractor is responsible for co-ordination and management of the web based content management system and all FIRST web-based content. This includes adherence to the "house-style" of content, the accuracy of data (link checking), attribution of sources, etc. The service provider must operate the server, the web server, and run the CMS system which FIRST is using. It must be secured using the TLS and using state-of-the-art security measures.

During 2015, FIRST may change its CMS system to an industry standard tool. The contractor will be expected to support migration as needed, and if determined during the migration to be valuable, manage the systems supporting the new system.

The contractor is encouraged to innovate, develop, support and maintain additional Web based services to further serve the membership of FIRST, the Board of Directors, SIGs and other relevant parties.

- Operate Webserver
- Maintain X509 Certificate
- Manage and migrate CMS as determined by the outcome of the 2015 AMS solution plan

Association Management System/membership database solution

During 2015, FIRST will migrate several services towards an integrated association management system. The AMS system must be operated on a server and must interface with many of our systems, most notably the mailing list system and the CMS system. Depending on the technology selection, the AMS may or may not contain the CMS functionality. The provider must operate the server.

Requirements
- Operate server for AMS
- Operate the AMS solution

Duties
- Operate the server and solution: Infrastructure Provider
- Development of AMS: AMS provider
- Content: Members and FIRST Board of Directors, secretariat

Email service offering

One of the most vital aspects of FIRST's communications infrastructure lies within our email service offering. It is the duty of the contractor to maintain this service and ensure its reliability, consistency, professionalism and availability.

Requirements
- Operate Mailserver
- Maintain Email addresses
- Website and API for management
- TLS must be implemented
- DKIM must be implemented
- SPAM and AV solution
- Maintain X509 Certificate

The mailing list system must be operated by the provider and it must be manageable either through a Webserver and through an API in order that we provision it form the AMS system/membership database. For the future we might also look at offering encrypted mailing lists by using either PGP or SMIME.

Requirements
- Operate Server for mailing list
- Operate mailing list system

- Encrypted mailing lists should be possible
- Interface with membership database/AMS

Duties
- Operating the solution: Infrastructure Provider
- Maintaining the service: Infrastructure Provider and FIRST Sec Team
- Content: FIRST Board of Directors, secretariat

Further, the contractor is responsible for interaction with the FIRST membership via the FIRST email service in a timely manner. The contractor shall ensure that the FIRST email service responds to the needs of the Membership by providing the appropriate capabilities, including, but not limited to: Anti-Spam/Malware, electronic mailing lists, and PGP & X.509 based encryption where required (including all technical infrastructure required to maintain this feature), aliases, and general email diagnostic services as it pertains to the FIRST email service.

Wiki
The WIKI system is used by the FIRST Board of Directors and for SIGs. It is preferable that the solution is bought from a cloud provider. Currently we use Confluence.

Requirements
- Operate or buy Ticket system
- Maintain user and solution

Duties
- Operate/Buy Solution: Infrastructure Provider
- Maintain Service: Infrastructure Provider and FIRST.org Sec Team
- Content: Members and FIRST.org Org Team

Additional cryptographic infrastructure services

In addition to the X.509 and PGP services for electronic mail, the contractor shall maintain the FIRST Certificate Authority (CA) and all client certificates as used by multiple FIRST services for her members. It is the duty of the contractor to ensure that all certificates are properly maintained, revoked and administered in order to maintain the integrity of FIRST cryptographic based services.

The contractor is permitted to delegate to trusted third parties certain aspects of the FIRST infrastructure (such as physical hosting, operating system maintenance, backups, etc.), however, the contractor maintains full responsibility for the service and must ensure its continued functionality, availability, security, quality and responsiveness to the FIRST membership, as well as the full integrity of all data stored within the service.

From time to time, FIRST members provide other volunteer-based services, such as an IRC server for real-time communication; the contractor is responsible for keeping track of all community provided resources and facilitating their use by the Membership. The contractor should be prepared to assist in answering questions on the use of these services and working with the maintainers to provide maximum benefit and utilization to the FIRST membership.

SECTION 3.0 PROPOSAL PREPARATION AND SUBMISSION

- The response must include costs to provide all services outlined in this RFP.

- Describe how your proposal meets each requirement of Section 2 of this RFP.

- Identify the individuals who would contribute to the project. Describe the qualifications of each individual.

- Provide references from jobs of similar size and scope with the proposal submittal.

- Provide examples of work from jobs of similar size and scope with proposal submittal.

- Any agreements (e.g. licenses, etc.) that vendor or any third party proposes to be entered into as part of a contract resulting from this RFP must be included with the proposal response.

- A representative authorized to bind the company must sign the proposal.

- The proposal must be submitted in PDF form via email to rfp-response@first.org.

- Proposal Receipt Deadline: November 6, 2015.

If you have questions concerning this RFP please contact the FIRST Chair:

Ms. Margrete Raaum
rfp-response@first.org
FIRST.Org, Inc.
P.O. Box 1187
Morrisville, North Carolina 27560-1187

Additional Terms

A response to this proposal does not create any agreement between vendor and FIRST.Org, Inc. and does not create any commitment on the part of FIRST.

If a contract is awarded, FIRST reserves all options regarding the terms of the contract and will establish the terms at the point of issuing a contract.

FIRST reserves the right to amend or cancel this RFP at any time prior to the submittal deadline.

All material submitted regarding this RFP becomes the property FIRST.

If a prospective vendor includes any information in a proposal that it wishes to keep confidential, it shall clearly identify such information in the proposal.