THE PORT AUTHORITY OF NY & NJ

PROCUREMENT DEPARTMENT
4 WORLD TRADE CENTER
150 GREENWICH STREET, 21ST FLOOR
NEW YORK, NY 10007

REQUEST FOR INFORMATION (RFI)

TITLE: Datacenter Relocation Request for Marketplace Information

NUMBER: 51418

RESPONSE DUE DATE: MONDAY DECEMEBER 4, 2017   TIME: 2:00 PM Eastern Time

QUESTIONS DUE DATE: MONDAY NOVEMBER 13, 2017   TIME:200 PM Eastern Time

BUYER NAME: Raymond Cabrera   PHONE NO: (212) 435-5651
                Stacey Willner   PHONE NO: (212) 435-4603
      EMAIL: racabrera@panynj.gov
                swillner@panynj.gov

1. **GENERAL INFORMATION: THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

For background with respect to The Port Authority of New York and New Jersey (the "Port Authority" or the "Authority") see www.panynj.gov. Additionally, the most recent electronic version of the Authority's Annual Report is available at http://www.panynj.gov/corporate-information/annual-reports.html

2. **OVERVIEW / REQUEST**

The Port Authority is seeking information from firms ("Respondents") that may be interested in providing data center relocation or colocation services.

The Authority currently operates one of its two data centers at the Teleport in Staten Island and is seeking information from the marketplace on alternative locations for this data center.

It is currently anticipated that the Authority will issue solicitation(s) for the actual services to be consumed, but is first seeking marketplace advice as to options that are available.

We are interested to hear any solutions including, but not limited to:

- "Forklift replacement" of equipment to a new data center
- Moving applications to new servers at a different facility
- Hybrid of moving applications to a new physical data center and the cloud
- Tier vs. workload

As part of this analysis the Authority is seeking information on the following tradeoffs:
- Buy vs. lease / rent
- On premises vs. cloud offerings
- Shared vs. private resources

Finally, the Port Authority is seeking information on best practices relating to how to move forward with a data center migration.

The Port Authority will not preclude firms or organizations who do not respond to this RFI, nor will it preclude firms or organizations who do respond to this RFI, from participating in any possible future procurements related to the subject services. Further, the Port Authority encourages both consulting firms as well as actual wholesale data center and retail colocation data center providers to respond to this RFI.

While not required for participation in the RFI process, Respondents that are not currently registered as a vendor with the Port Authority are encouraged to do so at http://www.panynj.gov/business-opportunities/register-business.html.

3. AUTHORITY DATA CENTER TECHNOLOGY PROFILE

See *Attachment B*

4. SUBMISSION OF INFORMATION

Each Respondent shall EMAIL a .PDF copy of its response to Raymond Cabrera at racabrera@panynj.gov and Stacey Willner at swillner@panynj.gov by the due date and time conveyed on the cover page of this RFI. The subject line should clearly indicate the transmission is in response to the RFI for DATACENTER RELOCATION and include the RFI number #51418 listed on the cover page.

Exclude any images in your response that could complicate the easy dissemination of your response. Moreover, do not provide marketing materials.

The response shall express the Respondent's interest in providing data center relocation or colocation services. The Response shall also include or identify:

A. *Transmittal Letter*

1. The name, address, homepage URL and Federal Employer Identification Number of the Respondent.
2. Contact information (name, title, email, telephone number) of the individual who shall act as the Respondent's contact with the Port Authority for further information requests and future solicitations, if any. In addition, at any time after the opening of the responses to the RFI, the Authority may request additional information relating to the Respondent's qualifications and will use this individual as the point of contact for these queries.
3. A brief description of the Respondent, its lines of business, organization, mission, affiliates, objectives, location, years in business under its present business name, and a list of previous business names used, if any.
4. What part of the supply chain the Respondent services. Whether the Respondent provides consulting services, wholesale data center services, retail colocation or other related products and/or services.

B. *Executive Overview & Statement of Understanding*

The Respondent shall submit a summary presenting the major features of its response and how the response satisfies the items contained in this RFI, as well as the special competencies and expertise of the Respondent to meet the requirements of this RFI. (1-page maximum).

The Statement of Understanding should explain the Respondent's understanding and interpretation of the key goals and objectives of the Authority including understanding of supply chain, security, change management, and transition requirements Areas not in this RFI but which the Respondent believes are essential to the effective performance and completion of the required services should also be addressed. (2-pages maximum).

C. A signed copy of *Attachment A* (Agreement on Terms of Discussion).

D. Responses to questions in *Attachment C* (Authority Areas of Interest)

Given the environment described in *Attachment B*, please provide a response in the form of a white paper, slide deck, or other appropriate written medium, that communicates your vision as to how the Authority can best manage its data center and related assets.

Your response should address the items in *Attachment C* (Authority Areas of Interest) where applicable and appropriate.

E. Cost Estimate (Rough Order of Magnitude)

For budgetary purposes only, provide a rough order of magnitude (ROM) cost estimate for the subject services that the Authority could expect. Please include the following as part of the ROM
1. A description of the metrics relevant to costing models.
2. If there is a difference between capital and operating costs, please detail how this is traditionally accomplished.
3. A discussion of the impact (if any) that the length of the overall agreement has on the cost structure.
4. Detail how the Authority can effectively estimate total cost of ownership.
5. How is growth typically accounted for? (i.e. adding and subtracting services during the life of the contract) for such components as.
    (a) Organic server growth and/or Operating System Environment growth

    (b) Changes in data storage

    (c) Changes in networking and connectivity in/out of vendor solutions

    (d) Ongoing operations & services

G. **Estimated Timeline**:

Based on the information presented in this RFI and on your experience, provide approximate durations for the required planning and transitioning activities

H. **Information for a Solicitation**

Regarding potential future solicitation(s) for the subject services, identify additional information necessary for interested respondents to develop complete proposals

5. **QUESTIONS**

Any questions by prospective Respondents concerning this request shall be addressed by email to the Buyer listed on the cover page of this RFI, no later than the listed question due date and time.

6. **CONFERENCE**

At any time after the receipt of responses, Respondents may be asked to attend an informal discussion with staff of the Port Authority regarding further clarification of the response and/or for additional information. Selection of such firms, if any, will be at the sole discretion of the Port Authority based on review of submitted material and other information gathering. To facilitate the free flow and exchange of ideas and information, the Port Authority intends to meet with Respondents separately. The Port Authority will communicate the date, time, place and objectives of such conference in due course. The Port Authority may use the information gathered during this process to refine the requirements and capabilities on which to base a solicitation, if any.

7. **GENERAL**

A.   The Port Authority reserves the right to conduct interviews, issue a solicitation for a proposal, or to perform none of the above.

B.   The Port Authority reserves the unqualified right in its sole and absolute discretion to choose to accept or reject any and all firms responding to this RFI on the basis of an evaluation of the responses to the RFI. The Authority also reserves the unqualified right to request further information from any Respondent.

C.   Neither the expression of your organization's interest, nor the submission of your response to the RFI and any documents or other information supplied by you, nor any correspondence, discussions, meetings or other communications between your organization and the Port Authority, shall impose any obligation on the Port Authority. The Port Authority shall have no obligation to any Respondent. Costs of participation or information preparation are not compensable.

ATTACHMENT B: Authority Technology Profile

1. Teleport Data Center
    o   Size (sq. ft.) – 6,000 sq. ft.
    o   Location – Staten Island, NY

2. Physical Server Environment at Teleport – Windows 2012
    o   Physical Servers (approximately 145 servers that host applications – one application per server)
    o   Approximately 200 cores make up the Physical Unit (Directly accessible memory space), all of which run applications
    o   Approximately 1,340 Cores make up the logical unit (Virtual space for Dynamic access of the Physical servers)

3. Virtual Server Environment at Teleport – VMware
    o   470 virtual servers that host applications (one application per server)
    o   95 physical hosts which run 1,000 Virtual Machines.
    o   Approximately 840 Cores make up physical unit (Directly accessible memory space).
    o   Approximately 570 Cores make up the logical Unit (Virtual space for Dynamic access of the Physical servers)

4. Linux and Solaris environments used for Enterprise Systems

5. Mainframe Environment
    o   *IBM z9 Business Class server, Machine Type 2096-R07*
        ▪   Capacity Marker C01 (~ 48 MIPs)
        ▪   8 GB of processor memory
    o   *IBM DS8100 Storage server, Machine Type 2107-931*
        ▪   1.6 TB useable capacity (using 146GB, 10RPM drives)
        ▪   16 GB cache

6. Networking Equipment
    o   The network consists of state-of-the-art Cisco Systems equipment and services, such as, high performance Cisco Catalyst switches and routers.
    o   Network connection to the Azure Cloud and Office 365
    o   Various special needs appliances for VPNs, proxy servers, firewalls, security products etc.

7. Applications
    o   Over 75 unique applications stored on physical servers.
    o   96   unique   applications   stored   in   the   virtual   environment.

8. SAN – Backup storage details:
    o   Consists of over 25 servers with over 2600 TB of Storage Space

        o   Includes secondary storage devices.

9. Data Replication & Failover
        o   Data replication and failover services provided to applications currently running in Authority's other datacenter.

ATTACHMENT C: Authority Areas of Interest

I.   *Services*
    a. What is the range of services you offer?
    b. Describe your fulfillment channel (I.e. Do you partner with or use other firms to provide services or do you directly provide all services?)
    c. How are outages prevented, handled and communicated?
    d. Does your support staff have access to technicians around the clock?
    e. Do you provide mainframe services?
    f. How are responsibilities divided between Authority and Provider (i.e. RACI type matrices)?
    g. How are changes / new commissioning / decommissioning typically handled?

II.   *Communication / Escalation / Reporting / Invoicing /Change Management*
    a. What is your method to ensure clients are informed?
    b. How are emergency situations handled?
    c. Do you provide any real time dashboards, calculators, etc.?
    d. How are temperature controls handled in your data center?

III. *Security*
    a. What background screening and security (physical and logical) are in place for staff, contractors and premises?
    b. How are servers patched?
    c. How is firmware for computer hardware managed?
    d. How dos your organization manage to the NIST 800-53 R4 cybersecurity standards.
    e. What is your philosophy regarding the changing nature of threat mitigation?
    f. What are the processes in place to prevent a cyber-attack?

IV.   *Audits*
    a. What audits do you perform, to what level, and how frequently (i.e. SSAE 16 SOC2 Type II)?
    b. Do you allow the clients to audit your facilities?
    c. Do you allow clients to run penetration and vulnerability scanning?

V.   *Up time / Service levels / Outages*
    a. What is your historical up-time performance?
    b. Do you provide service or performance levels?
    c. How often is your power switching tested for load performance?
    d. How are alert notifications handled?
    e. Describe the redundancies and protections you use.
    f. Can the client define alert thresholds for failures or operating thresholds?

VI.   *Transition Timeframe, Concerns, and Best Practices*

    a. Discuss the process of transitioning out of the existing data center and into your newly proposed environment.

    b. Discuss the process of transitioning out of your proposed environment at end of contract.

VII. *Redundancy and High Availability Options*

    a. Do you provide redundancy in the form of backing up data at another data center?

    b. Capability to replicate data and applications between data centers that are not part of your environment?

    c. What are your on-site high availability options?

    d. What are your backup option?

VIII. *Sizing and Growth*

    a. Do you have existing capacity or do you need to secure additional capacity to meet the Authority's existing needs?

    b. Do you have the ability to include IBM mainframe functionality?

    c. How is growth / change handled?

    d. Is it possible for the Authority to shrink its footprint as it moves applications to the cloud?

    e. How do you expand your volume when there is a requirement for an increase in applications?

IX. *Resources / Expertise / Workforce*

    a. Please provide a functional organizational chart.

    b. What certifications do your staff maintain?

X. *Telecommunications*

    a. Are your offerings carrier neutral?

    b. Describe redundancies and protections used.

XI. *Discuss ability to adapt to new trends*

    a. What is your organization's approach to reviewing and implementing technology, equipment, and processes related to new industry trends?

XII. *Contracting process*

    a. Describe the length of your typical contract

    b. Discuss financing options.

    c. How does the termination of a contract work?

    d. What is the contract process like in your organization?

XIII. *Location*

    a. From which geographic region (s) do you provide your data center and services?

    b. How is physical access for client staff provided for?

    c. How are your facilities protected against natural disasters?

XIV. **Market Segment**
   a. Without providing identifiable information, please describe who your typical clients are and what market segments you service.