Technical Specification

Procurement of software package for data storage and management of migration analytical system with the accompanying services

The aim of abovementioned technical specification is the Procurement of software package for data storage and management of migration analytical system within the LEPL Pubic Service development Agency (hereinafter – the Agency) with the accompanying services.

Existing System

Computer platform of migration analytical system is presented by following hardware and software set:

- 1. Servers 8 x HP DL380 Gen9 with 2 x Intel E5-2680 v3 CPU, 256GB RAM, 24 x 1.2TB 10K SAS HDDs, 2 x 120GB SSDs, 2 x 10G SFP+;
- 2. Hadoop distributive 3 x JP408AAE Hortonworks Data Platform (HDP) Enterprise Plus Subscription 4 N/50TB Raw Strg 1yr 24x7 Supp E-LTU;

Presented hardware and software set is installed in the main data processing center of the Agency.

Place and dates of delivery

Supplier is obliged to provide the object of procurement with accompanying services (installation, configuration) to the acquirer within no more than 15 days after signing the contractual agreement in Tbilisi, 67a Tsereteli ave.

Supplier Obligations

- 1. Supplier is obliged to provide Hadoop Commercial Distribution with one of the following options:
 - 1.1. Submit Hadoop Commercial Distribution on 8 items of abovementioned servers and on the data of 50 TB amount. Presented Commercial Distribution should meet the following requirements:
 - 1.1.1.The object of the procurement should be enterprise level, state of art at the time of delivery Hadoop Distributive with commercial support. (For example: Cloudera, Hortonwors, MapR and etc.);
 - 1.1.2. The object of the procurement should include the existence of at least the following components and full manufacturer support: HDFS, YARN, MapReduce, Ambari, Hive, Falcon, Flume, Cacsading, Tez, Zookeeper, Knox, Pig, Sqoop, Kafka, Ranger, Spark, Storm, Oozie, Hbase, Hive, Hue, Mahaout, Oozie, Phoenix, Slider, Accumulo, Atlas, Zeppelin, Cloudbreak in HDP;
 - 1.1.3. The object of the procurement should have/possess authentication support in the Hadoop cluster using the Kerberos protocol. Authentication with the mentioned security protocol should be possible within services (HDFS, YARN, HIVE, etc.), as well as in case of attempt to connect with acquirer's customer's cluster;
 - 1.1.4.The object of the procurement should be able to integrate the Hadoop cluster with the organization's Active Directory / Domain Controller server using LDAP and Kerberos protocol;
 - 1.1.5. The object of the procurement should be able to grant all the users and services relevant rights and conduct detailed audit of them;
 - 1.1.6. Increasing the size of data file storage and throughput should be able by adding a server by the purchaser;

- 1.1.7. The supplier should provide warranty service to the acquirer (within 1 year after the signing of the acceptance-delivery statement between the parties), which includes support for the software package of data file storage by its direct manufacturer;
- 1.1.8.Resources reservation, distribution and arbitration of all the input of the procurement object, as well as analytical data base's ETL (if it is distributed in Hadoop), and BI tool's (if it is distributed in the Hadoop) should be conducted by the YARN tool;
- 1.1.9. The permit to use (license) the proposed procurement object must be permanent.
- 1.1.10. In case if the supplier presents distributive different from existing Hortonworks Data Platform, the supplier is obliged to ensure (within 7 days after signing the contractual agreement) full installation of the procurement object on 8 physical servers (allocation of appropriate space on physical servers and access to it is provided by the acquirer), configuration (all the important inputs of the system NameNode, JobTracker and etc. should be duplicated and reserved), setting up production environment, moving all the existing processes (data import, ETL process, business analysis module) of the migration analytical system on the presented Hadoop distributive, and also, transfer of knowledge to the responsible employees about the installation, configuration, expansion and use of the proposed procurement object. The knowledge must be transferred (to no more than 3 employees of the buyer) during the installation works.

Warranty service

During the warranty service period, supplier is obliged to comply with warranty service deadlines, presented in figure $N^{\circ}1$. The timing of the service depends on the respective priority. When registering an incident, the appropriate priority is indicated via email or the supplier / manufacturer's website. Priority matrix is presented in figure $N^{\circ}2$.

Figure №1 - Warranty Service Period

Priority	Response time	Maximum resolution time	Support time
Priority 1	1 hour or less	Maximum 3 hours	24 x 7
Priority 2	1 hour or less	Maximum 6 hours	24 x 7
Priority 3	2 hours or less	Maximum 1 business day	Working hours, Monday - Friday
Priority 4	4 hours or less	Maximum 3 business day	Working hours, Monday - Friday

Priority №2. Priority Matrix

influence	Urgency				
influence	Urgent	High	Average	Low	
On the Agency	I Priority	I Priority	II Priority	III Priority	
On the Department	I Priority	II Priority	III Priority	IV Priority	
On the unit	II Priority	II Priority	III Priority	IV Priority	
On the user	III Priority	III Priority	IV Priority	IV Priority	

Additional Requirements

- 1. The Supplier must provide a Hadoop distribution manufacturer partnership attestation document;
- 2. In order to check the compatibility of the functionality of the proposed analytical platform with the technical specification, in case of inaccuracies arising on the basis of information provided in the tender proposal or information received from other sources, the tender commission is entitled to request clarification in accordance with the rules stipulated by the law;