

RFP FOR TWO FACTOR FINGERPRINT BIOMETRIC AUTHENTICATION

RFP Ref : LIC/CO/IT-BPR/2FA/2018-19 Dated 17/01/2019

ANNEXURE V - FUNCTIONAL AND TECHNICAL REQUIREMENTS

(In case bidder's response to any of the questions given below in Annexure IV is "No", the bidder will be treated as disqualified for the bid)

S.NO.	Description	Bidder's Response (Yes/No)	Bidder Comments	Ref. Page No.
Part A: Requisite features of 2FA Solution				
1	Whether the proposed solution is Single Interface, Applet less and Browser independent.			
2	Whether the proposed solution is compatible with the existing Cogent CSD 200 devices.			
3	Whether the bidder will be able to migrate the existing database to the proposed solution.			
4	Whether the solution is based on premise development model.			
5	Whether the proposed solution maintains Audit logs			
6	Whether the proposed solution has provision of automatic archiving of old data (i.e., data past its life time) to save on storage box and to optimize the solution.			
7	Whether the vendor proposes a clean sweep of the existing solution, either with the reuse of existing Neurotech matcher and de-duplication engine or proposes to implement a new Matcher and de-duplication engine			
8	Whether the proposed solution includes automated process of de-duplication of all user enrollments done in LIC.			
9	Whether the proposed solution include centralized architecture for Fingerprint Scanner for enrollment, validation, matching, de-duplication and authentication of fingerprint data. This data has to be synchronized with central repository at regular intervals.			
10	Whether the proposed solution has two instances of setup, one at DC and another as 100% DR. The vendor shall also be required to setup UAT and Test & Development environments as part of the solution.			
11	Whether the proposed Database Servers are configured as an Active – Active cluster at the primary site (DC) and the disaster Recovery (DR) Site with high availability network load balancing.			
12	Whether the proposed solution is customizable and configurable to support an architecture whereby multiple users share a common finger print device in the branch for authentication, as well as have provision for use of one device per user. This should be configurable at the server level whenever LIC desires so.			
13	Whether the proposed solution is Customizable application software and its integration can be done with the LIC's core insurance application and any other web application chosen by LIC. This has to be done by the bidder at no additional cost to the LIC. LIC will provide requisite technical information about the existing web-based application for integrating it with the proposed 2FA solution (if any).			
14	Whether the proposed 2FA solution will return the success/failure response to any login attempt within 3-5 seconds.			
15	Whether each record in the proposed solution will pertain to a single subject and will contain an image record (consisting of single view) for each of one or more fingers; multiple fingers (single image records).			
16	Whether the bidder ensures that the 2FA solution offered, accepted and implemented does not in any way disturb or degrade the performance of either the back-end or front-end functioning of the core insurance application or any other application of LIC.			
17	Whether the proposed solution is compatible with the client machines which could be thin clients/desktops/laptops currently working on all versions of RHEL 5.4 or above, Windows XP and above which should be supported by the proposed 2FA SDK/APIs.			
18	Whether the proposed solution is capable of providing various MIS and audit trail reports of login by users and transactions made using 2FA, as and when required by LIC/LIC's internal/External auditor, Regulatory authorities.			
19	Whether the bidder proposes to provide latest version of enterprise wide perpetual license for the 2FA application, with unlimited user license and for unlimited instances within LIC.			
20	Whether the proposed hardware is suitably sized for LIC to ensure smooth 2FA login and authentication with 1000 concurrent authentications. Provision should be kept at the time of sizing for at least 10% growth in number of users over the next 5 years. In case, the Hardware specification or the software ability to handle the said load is found to be insufficient, the bidder will have to bear the cost of upgrade of the hardware or software.			
21	Whether the bidder has benchmarked & sized the requisite Hardware & software licenses involved in 2FA solution depending on the number of users and peak time of operations of LIC. The existing Licenses available under the 2FA project of LIC will be made available to the vendor at GO Live stage only. Any other licenses required for development, UAT and deployment has to be factored and need to be procured by the vendor in favour of LIC.			

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22	Whether the bidder has submitted details of hardware & software technical specifications (including system software/OS mentioning version nos.) purported to be used for the 2FA solution as per Annexure X Annexure XI along with the technical bid.			
23	Whether the proposed solution ensures an uptime of 99.5%, calculated on a quarterly basis and Hardware and Software have to be provisioned accordingly.			
24	Whether proper provision has been made in proposed 2FA solution to use LIC's existing network, which is based on Leased Lines, MPLS, VSAT or any other suitable networking technology/method adopted by the LIC. Bidder needs to clearly mention the network bandwidth requirements in their technical proposal.			
25	Whether bidder ensures the resources availability at LIC starting from the start phase till the completion of rollout of 2FA solution at all the branches of LIC. The cost for the same should be factored in implementation cost. Bidder should also ensure the availability of minimum three onsite resource in Mumbai or any other location in India as decided by LIC after the implementation, in order to provide technical support for the 2FA solution / biometric device, under maintenance (warranty/AMC/ATS) services cost. However LIC may decide to add more number of resources at such location(s) and the bidder should be in a position to cater to the requirement as and when required.			
26	Whether the Onsite resource will pro-actively monitor the breakdown calls of solution / device and ensure that breakdown calls are closed in time as per SLAs and submit the monthly / quarterly breakdown call reports to LIC.			
27	LIC has implemented Active Directory in Windows desktops & laptops. Whether bidder proposes to provide solution for integration of Active Directory implementation with 2FA solution.			
28	Whether the bidder will take into account compliance to all licensing, statutory and regulatory requirements while submitting their technical & commercial bids.			
29	Whether the bidder proposes to provide Project Planning and Management			
30	Whether the bidder proposes to provide System Study and Preparation of Functional Requirement Study Document, Systems Requirement Study document, data flow diagrams, data model, flow-charts, entity-relationship diagrams, etc.			
31	Whether the proposed solution is compatible to Integrate with the available matcher and de-duplication engine.			
32	Whether the bidder proposes to provide the Design of the security and information architecture for the proposed solution.			
33	Whether the proposed solution ensures Configuration of users, groups and workflow for various stakeholders of LIC on 2FA solution for user enrollment validation, maker-checker and approval process.			
34	Whether the proposed solution provides appropriate web-based workflow system for maker-checker facility and validation of the user enrollments and mappings done with captured fingerprint data.			
35	Whether the bidder proposes to provide requisite software development tools & assistance in code development for integration of existing web-based applications with 2FA solution.			
36	Whether the proposed solution is able to provide protection from client side vulnerabilities such as Confused Authorisation attacks, Fingerprint Data Storage Vulnerability, Fingerprint Sensor Exposure Vulnerability, and Pre-embedded Fingerprint Backdoor etc. to secure the biometric framework at client and server side.			
37	Whether the proposed solution supports for virtualization at the application infrastructure level.			
38	Whether the bidder proposes to provide a web-based service manager for tracking, escalating & resolving user complaints.			
39	Whether bidder proposes to provide a robust & fool-proof backup & storage solution for storage, backup & retrieval of 2FA data.			
40	Whether the bidder proposes to provide Performance & Security testing, Unit Testing, User Acceptance Testing support with provision of automated test scripts.			
41	Whether the proposed solution allows horizontal and vertical scaling, to meet the load that may increase from time to time			
42	Whether the bidder proposes to provide OEM Training and OEM certified documentation to minimum 50 LIC employees involved in development of web-based applications in LIC and integration with 2FA solution for two factor authentication.			
43	Whether the bidder ensures Maintenance and onsite support for each software and hardware components procured through this RFP along with the components re-used from the existing 2FA solution.			
44	Whether the bidder ensures for Knowledge transfer, system documentation and handing over the entire source code of the solution to LIC at the end of Pan India rollout sign off.			

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	Part B:Requisite features of Fingerprint Biometric Scanner Devices (Part B)			
1	Whether the bidder proposes only one make and model of the Single Finger Print Scanner under this RFP.			
2	Whether the bidder ensures that fingerprint scanners are compatible with all versions (32 bit and 64 bit) of Red Hat Enterprise Linux desktop versions 5.4 or above, Microsoft Windows XP or above, and also on all future versions of the abovementioned operating systems, without any extra cost to LIC.			
3	Whether the proposed Fingerprint Devices have firmware-level encryption and Live Finger Detection capability.			
4	Whether the bidder ensures that except the scanner driver software, there should not be any requirement of loading any software/ license at User's end.			
5	Whether the bidder proposes to provide the Driver software along with the SDK/API for the proposed as well as existing fingerprint biometric scanner devices, to facilitate integration of the device driver software in a secured manner with the LIC's back-end Server side SDK. The security mechanism should ensure defense against Man-in-the-middle (MITM) or replay attacks.			
6	Whether the bidders ensures to replace the faulty fingerprint scanner within the specified time as per SLA.			
7	Whether the bidder ensures that along with the biometric scanner devices, the bidder will provide licensed copies of client side component software (scanner Driver Software) along with SDK (Software Development Kit) to LIC, which will contain API for fingerprint capturing and extraction process.			
8	Whether the bidder proposes to integrate the operation of the biometric device with the proposed 2FA solution and LIC's web-based application.			
9	Whether the proposed fingerprint scanner are in conformity with ISO 19794-2 (Fingerprint template Compliance for minutiae data) and ISO 19794-4 (Fingerprint template Compliance for image resolution) formats for the fingerprint minutiae and the fingerprint captured and extracted images, respectively.			
10	Whether the proposed devices are capable to capture the live template compatible to the enrolled template stored in the centralized server for finding out the matching result.			
11	Whether the bidder proposes to provide suitable documentation on installation of client side component.			
12	Whether the bidder proposes to deliver fingerprint scanners to all LIC office locations across India viz. Satellite Office/Branch Office/Divisional Office/Zonal Office/Central Office for installation and provide necessary training to LIC officials for successful installation of these devices.			
13	Whether the proposed solution ensures a web-based user interface for inventory of the fingerprint scanners (including existing inventory data after migration) along with the details of user allotment, endpoints connected, etc. and provide all requisite MIS reports. This should be integrated with LIC's hardware inventory system.			
14	Whether the bidder proposes the guarantee for continued support and service during the warranty period & AMC for the biometric scanner devices, which would be installed at different branches/offices.			
15	Whether the bidder ensures that the scanners remain compatible with any hardware, software, firmware and patches/upgrades done periodically on the branch/office desktops, as per LIC's Policy			
16	Whether the bidder ensures capturing the live template compatible to the enrolled template stored in the centralized server for finding out the matching result.			
17	Whether the bidder proposes to Handle pending fingerprint enrollment of LIC employees (approximately 55000 as on date) & other authorized users working in LIC offices spread across the country.			
18	Whether the proposed Fingerprint Scanner device Model & Make is STQC certified			
19	Whether the proposed Biometric scanner device uses USB connectivity with atleast 2 meters cable.			
20	Whether the bidder proposes to maintain a sufficient inventory stock of working fingerprint scanners at any given point of time, so that the replacements can be done without any delay.			
21	Whether the proposed Fingerprint Scanners have unique identification codes / serial numbers			

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22	Whether the proposed Fingerprint Scanners proposed in the solution are not at end of life. Such devices should be available in India for next 5 years.			
23	Whether the proposed Fingerprint Biometric Scanner device is rugged and scratch resistant (IP 54 compliant)			
24	Whether the proposed Fingerprint Biometric Scanner device supports Auto capture with built-in quality check (must incorporate NIST quality considerations)			

Bidders to submit documentary evidence in support of their responses to above specifications.

Place :

Signature of Authorised person with Company seal

Date :