

5. Revised Project Timelines

The bidder will be required to provide all necessary assistance to ensure successful implementation of the project from the time of engagement. LIC may place separate purchase orders for Hardware, Software licenses, Onsite support services and Annual Maintenance Charges.

All the hardware components and the software, implementation, migration, integration, onsite resources as mentioned in the RFP are expected to be delivered as per schedule given below. Non-adherence to the time schedule would invite application of penalty as per SLA.

Sr. No.	Activity	Delivery Schedule
1	The details of information required from LIC	Within 1 week from the date of Purchase Order or Contract
2	Submission of Detailed Scope of Work and Detailed Project Implementation Plan	Within 1 week from the receipt of information required from LIC
Part 1 - <u>Management of Directory Services for Windows</u>		
3	Deployment of 2 on-site Engineers in Mumbai (for maintenance and management of Windows based devices)	2 weeks from the date of Purchase Order or Contract
Part 2 - <u>Implementation of Directory Services for Linux</u>		
4	Delivery of Hardware - For Linux	8 weeks from the date of Purchase Order or Contract
5	Delivery of Software - For Linux	8 weeks from the date of Purchase Order or Contract
6	Implementation, Integration, Project completion period for Linux Directory Services	20 weeks from the date of Purchase Order or Contract
7	Deployment of 4 more on-site Engineers in Mumbai	At Go-live

6. Revised Scope of work and Deliverables

6.1 Executive Scope of Work

The scope of work includes the following:

- Management of Domain, group policies, access control, etc for Windows Endpoints and Servers using Active Directory.
- Supply, Implementation and Maintenance of Hardware, Software including all licences which may be required in **Centralised Architecture on Premises in Capex Model with HA and DR for Directory Services for Linux Endpoints and Servers.**
- Blocking of USB ports based on device and any other new policies which may be required to be implemented during the project period.
- The project period will be six years.
- Procurement of Client Access Licences (CAL) – 30,000 Windows Device CALs

6.2 Current Status

Windows desktops/ laptops in LIC are domain joined using Active Directory 2008 and are applied with Group Policies including password policy for users and Windows desktops through the Active Directory. LIC is in the process of migrating Active Directory to a Centralised Architecture with the latest version.

AD Policies implemented

- Disable CD-ROM autorun and the drive
- Firewall GPO - Disable Windows firewall and enable CAV firewall to prevent conflict
- Hide Games
- Hide Network Places from desktop
- Internet Explorer - Maintenance
- Provide Local Admin Rights to Administrators
- Software Restriction Policy
- Remote Desktop enable policy
- Screen lock if the system remains idle for 10 minutes
- User Account lockout for 30 minutes, after 5 wrong password attempts
- Password Policy – Complexity, Change password after two days, password expiry after 60 days, disallow last 5 passwords

Present architecture

- There is a Root Domain Controller at Vile Parle and there are additional domain controllers placed at several sites for local user authentication and mailing CAS servers.
 - There is no trust with any other domain to licindia.com.
 - Both Domain and forest functional level is windows server 2003
 - All FSMO roles owned by Root Domain Controller
 - Domain licindia.com-Active Directory structure: Windows 2008 Server Std; Single domain, single forest, Zone wise OU of email users objects, 1 RDC replicated to 10 ADCs.
 - Backup: Netvault Backup Software using LTO3 tapes.
 - Number of desktops connected to Active Directory – 30000
 - Total number of devices (Windows and Linux) including the above = 95000
 - The existing Desktops are installed with RHEL versions 5.4 and 5.9 (32 bit and 64 bit), Windows 10, Windows 8, Windows 7, Windows Vista.
 - Servers are installed with RHEL 5.4, 6.6, 6.7, 7.3
- Active Directory will be migrated to the latest version.

6.3 Detailed Scope of work

6.3.1 Design the Solution

Design solution with 99.5% uptime with following considerations:

- Centralized Architecture
- At LIC Data Centre CO – Vile Parle with High Availability, Automatic Failover and Disaster Recovery at a location to be specified.

The architectural diagram, implementation plan, responsibilities of the bidder and the company etc., as a separate document should be submitted with the technical bid for the solution proposed.

The project will comprise of two parts:

- Part 1 – Supply of Windows Device CALs and Management of Windows endpoints and servers
- Part 2 – Supply, Installation and Implementation and Management of Directory Services for Linux endpoints and servers.

LIC will issue separate Purchase Orders for Windows and Linux.

6.3.2 Supply and Installation of Hardware required for the proposed solution for Linux Endpoints and Servers

Assess the requirement, supply and install, configure the Hardware for the implementation of the Directory Services Solution based on following

- 65000 Linux endpoints and servers.
- Size the hardware to suit the requirement of the Directory Services Solution and the Operating System.
- High availability and Disaster Recovery to be maintained for Directory users. The proposed solution should offer near zero RPO and maximum 8 hours RTO.
- Scalability - The Hardware supplied should be scalable with reference to memory, storage space, processor etc.
- Implementing operating system security, performance tuning and hardening as per security standards and guidelines of LIC.
- The hardware should conform to best practices to give 99.5% uptime.
- The hardware supplied by the vendor should be of latest versions and should reach end of support by OEM only after 6 years.
- Configuration of the RAID or Virtualisation etc. should be as per best industry practices.
- Hardware to be supplied should include Rack Mounting kits, network switches, cables etc.
- Hardware proposed should be enterprise grade and should be under warranty of five year with OEM and should be covered under back to back support. MAF, as given in Annexure-III, is to be submitted as part of eligibility bid.

Server Specifications:

The servers proposed in the solution should be 1U or 2U Servers of latest configuration. The bidders can propose Converged/ Hyper converged Infrastructure.

6.3.3 Supply and Installation of Software and software licenses for the Directory Services Solution for Linux Endpoints and Servers

The installation should take the following into consideration:

- Software and software licenses should be supplied for Directory Services Solution having basic capabilities, Additional Directory Services if required, Operating Systems, and any other software and software licenses required for implementing the Directory Services solution.



- Software and Software licenses supplied and its numbers should take into consideration the Hardware, number of devices such that it should be fully compliant with regards to licensing policy of OEM.

The Software for Directory Services Solution should be compliant to the Technical and Functional Specifications of each of the above components as given in **Annexure V**.

All Software supplied should be of latest version. Commercial bid should contain bill/ list of software with quantity and cost and a separate list without cost with version, end of support and life date, should be part of Technical bid.

Bidder should provide updates, patches; rollups for all software supplied including operating system and should update the same immediately after its release. Back to back OEM support for all Software and updates to current Version is required to be provided. OEM authorization, partner status and back to back support document is to be submitted as part of eligibility bid.

Operating system security and hardening as per LIC cyber security guidelines and industry standards should be ensured.

The proposed solution should offer near zero minutes RPO and maximum 8 hours RTO. There should be failover at all levels like Directory Services servers, Database and Storage.

Load Balancer is provided as part of the Email solution to be deployed in LIC, which will take care of the Active Directory as well.

Software and software licenses when being proposed should take into consideration software licenses already procured by LIC as given below which can be used for implementation of this project:

- RHEL Server licenses – Enterprise license (Perpetual)

Software Warranty:

All software to be supplied/ delivered and installed under this RFP should form part of the OEMs current product line.

The technology providers, including OEM will be required to submit a written undertaking, explicitly stating their commitment to provide spares, full technical, operational and maintenance support to LIC during the warranty period.

6.3.4. Implementation of Directory Services for Linux Endpoints and Servers

The bidder shall be responsible for joining all the endpoints to the Directory Services. The endpoints should be configured to authenticate using the proposed Directory Services. The proposed Directory Services Solution should integrate with the existing Active Directory infrastructure. During integration, the bidder shall ensure that end user impact is minimized. The integration plan has to be submitted and discussed by the bidder with LIC and carried out after LIC's approval.

The Directory Services solution should be configured to provide audit trail of changes made to the system for various parameters assigned and for all the communication happening within and outside by all the users of these system

The Directory Services Solution should be configured with or migrated with security policies, filtering, user groups, attributes, etc as is already configured on existing servers or as per LIC requirements.

The solution should be modular and integrated on industry standard platforms to match the Functional and Technical requirements specified in **Annexure V**. After configuration the implementation is to be tested for end-to-end solution.



Implementation of solution in live environment is to be done location-wise, after testing is satisfactory and after obtaining LIC approval.

Bidder should provide updates, patches, rollups for all software supplied including operating system and should update the same immediately after its release.

The solution should be able to support all existing applications for LDAP authentication.

The Bidder shall be responsible for generation and submission of necessary documents required during various phases of the project viz. Planning, Installation, Commissioning, Roll Out, Acceptance and periodic reporting.

The Bidder is required to get prior approval of all the project plans and process from LIC before commencement of the project.

The Bidder should provide a detailed PERT/ activity chart with project plan in terms of activity & phase wise timelines (no. of days required) required for executing the project with the details of deliverables and milestones including the delivery of components for the solution.

The Bidder will be responsible for implementing any new policies which may be required by LIC.

The Bidder should inform the name of the project manager who would be the single point of contact during the complete project implementation.

The Bidder has to provide the reports for monthly review.

6.3.5 Annual Maintenance Contract

AMC Time Period & Maintenance Charges:

The rate for providing all inclusive Comprehensive Annual Maintenance Service for the Hardware applicable for the period of one year, after the expiry of the five year warranty period should have to be mentioned in the commercial bid. These rates shall remain firm and valid for a period of one year from the date of expiry of the warranty period. Annual Maintenance Service Contract Amount shall be paid on rendering satisfactory services.

The bidder shall guarantee the availability of spares for a period of 6 years including warranty period in respect of all the hardware and hardware accessories.

6.3.6 Maintenance of Active Directory

LIC is in the process of migrating from existing Active Directory 2008 to the latest version. The bidder shall be responsible for maintenance of Active Directory – managing domain, group policies, access control, etc and adding new policies as per requirement of LIC.

6.3.7 Support

Deployment Of Onsite Support Resources: The successful Bidder has to provide throughout the contract period

- (i) For maintenance of Active Directory, the services of **two** onsite Engineers,
- (ii) Beginning at Go-live of Directory Services for Linux Endpoints and Servers, the services of **four** onsite Engineers for its maintenance

at CO-Vile Parle with the qualifications and experience as defined below:

- Good Knowledge on Windows operating systems and Linux operating systems, Proposed Directory services, Management/monitoring, etc.
- Having MCSA covering Windows Server 2016 Administration and Implementation certifications in case of Microsoft/ RHCE (RedHat certified Engineer) or equivalent Expert Level certification in Proposed Directory Services solution and operating system.



- Should have 2 years' experience in managing a Directory service set-up of at least 10,000 user ids in the specific delivery method i.e. on-premises.
- Should be full time employee of the bidder.
- For seamless integration of the entire solution, the onsite resource will have to co-ordinate with the various projects and resolve the problem in regards to LDAP authentication or integration.
- The person should have a backup resource who will complement the person during routine jobs and supplement, if he is on leave. The backup resource should be accountable for providing the technical support to LIC.
- The onsite resource may have to be changed, if LIC so requests, if the performance is not upto the satisfaction of LIC. LIC reserves the right to increase or decrease the number of resources as per the needs by giving a notice of one month at the proportionate cost per resource as per the final commercials.

Support Process: The Bidder should provide a detailed plan on the support for the Directory services solution including back to back support with OEM to maintain the uptime of 99.5% and adhere to the following conditions:

- The bidder shall provide an escalation matrix in consultation with the LIC for different categories of support calls.
- The onsite support resources provided should be conversant with the regular system administration tasks, patch management, user management.
- The on-site support resources should be able to trouble shoot the problems raised and should maintain a log of them, also report it to LIC.

The bidder has to provide an interface for the central directory service administrators of LIC to carry out the routine, monitoring and administrative job on the server some of which are as follows and may be changed as per the business needs ensuring compliance to LIC Security policies.

Responsibilities of onsite resource:

- Bringing desktops in Domain, Add/maintain group policies
- Change & reset of user passwords, change of attributes, shutdown & restart of the server, giving access rights, support for LDAP user/ group provisioning, taking backup, etc.
- Server Health check-up.
- Monitoring logs
- Patching
- DR Drills
- Any other activity related to the project

The onsite support resources at the Central Office should be present on all LIC working days during LIC working hours. However, the above hours may be extended whenever required.

Backup resources have to be provided by bidder in absence of onsite resources. Absence of Onsite resources or late reporting will attract penalty as per SLA.

6.4 Action Plan for Compliance of Deliverables

Successful Bidder has to give action plan for compliance to each of the deliverables listed in this bid document on following basis.

- The Bidder will have to review the current architecture and infrastructure and suggest steps to ensure smooth installation, migration and updation of patches.
- The Bidder will have to study the security policies of LIC and recommend best practices to implement and roll out the same in the Organization at no extra cost.
- The necessary configuration changes are to be carried out within a specified maximum time period of 15 days from the date of release of latest update by OEM



at no extra cost for which a configuration/update implementation plan is to be provided.

6.5 Implementation Procedure

Plan for Project Implementation:

The selected bidder should develop the detailed implementation architecture for the Directory Services Solution. It should include the following details:

- Hardware Specifications for Directory Services Solution to be installed in LIC for carrying out the above project scope
- Software Specifications for Directory Services Solution to be installed in LIC for carrying out the above project scope
- Detail report to be submitted regarding design of database, design of process, migration of data in phases and configuration , deployment, testing & Roll-out
- Project Implementation plan (Graphical representation as well as details) Project Team Composition
- Escalation Matrix
- Integration of existing Active Directory users and devices with Directory Services for Linux.
- Ensure integration with applications such as Messaging solution, automated mails, Antivirus, Email gateway etc.

The Bidder shall nominate a project manager at Mumbai who shall be responsible for the entire execution and implementation of this project. He will be a single point of contact for LIC for any problem related to services procured under this RFP.

Documentation:

The bidder shall provide Documentation/ updated documentation related to changes made, at every instance of such changes in the application and integration parameters.

Bidder shall supply detailed "As Installed Drawings" after the completion of the project. This will also include a Printout of important configuration settings.

Training:

Bidder shall train specified LIC employees for Operational Management of the system. Training shall be provided on each of the following modules to specified LIC officials. Training shall be provided for minimum 4 working days duration through authorized agencies/ faculty for 10 persons, in LIC premises at Mumbai.

- Server management and Administration: 1 working day
- Creation of user ids, groups, Group Policies and administration, attributes: 1 working day
- Report generation using scripts and other aspects: 1 working day
- Monitoring and troubleshooting: 1 working day

Final Acceptance Testing

After installation of the software, all the features specified in the scope of work/ expected deliverables and Technical and Functional features should be tested by the bidder and acceptance obtained from LIC.

7. Revised Service Level Agreement (SLA), Penalties

Successful vendor(s) will have to agree to SLA and penalty clauses as given below. It will form part of the contract.

The penalty so calculated will either be adjusted with the payments or will be separately realized from the bidder.

The timelines will start from the date of Purchase Order for the respective phase.

Sl. No.	Description	Penalty, if not resolved within the Resolution time
1	Delay in request for details of information from LIC beyond 1 week from the date of receipt of LIC's letter about his selection as successful bidder	0.01 % of the Contract Value for every week of delay
2	Delay in submission of Details Project Plan	0.01 % of the Contract Value for every week of delay
3	Delay in posting of on-site Support Engineers for Windows AD beyond 2 weeks	3 % of the contract value of the annual on-site charges per week of delay
4	Delay in Delivery of hardware beyond 8 weeks from the date of receipt of contract/ purchase order	0.01 % of the contract value per week of delay
5	Delay in Delivery of software, licenses etc. beyond 8 weeks from the date of receipt of contract/ purchase order	0.01 % of the contract value per week of delay
6	Delay in project implementation period beyond 20 weeks (for Linux) from the date of purchase order	0.1 % of the contract value per week of delay
7	Delay in posting of on-site Support Engineers at Go-live	3 % of the contract value of the annual on-site charges per week of delay
8	Uptime	
	>= 99.5% uptime calculated quarterly	-Nil-
	>=98% and < 99.5%	5% of AMC Invoice Amount for the quarter
	>=95% and < 98%	15% of AMC Invoice Amount for the quarter
	< 95% uptime	25% of AMC Invoice Amount for the quarter
9	On-site Support	
	a) Default in carrying out Preventive Maintenance once in a quarter	Rs. 500/- per Server per default
	b) If the onsite support resource leaves and no replacement is provided by the bidder	Rs.2500 per day till the replacement is provided by the bidder

	c) Failure of The on-site support resources to submit the reports and provide services as defined in the Support Process /Contract	Any type of adverse reporting about the on-site engineer at C.O. will attract a penalty of Rs. 20000 per quarter on the charges of on-site engineer. The Engineer may have to be changed, if LIC so requests.
	d) Late attendance beyond 2 hours/ absence of on-site Engineer in LIC premises	INR 2500/- per day per resource
	Absence without replacement or delay in posting of new onsite resources will attract penalty.	

Project Team: Vendor(s) has to deploy an appropriate Project Team at LIC Central Office, Mumbai (Vile Parle Office) as per the requirements.

Substitution of Project Team Members: During the assignment, the substitution of key staff identified for the assignment will not be allowed unless such substitution becomes unavoidable to overcome the undue delay or that such changes are critical to meet the obligation. In such circumstances, vendor(s) can do so only with the concurrence of the LIC by providing other staff of same level of qualifications and expertise. If the LIC is not satisfied with the substitution, LIC reserves the right to terminate the contract and recover whatever payments made by the LIC to vendor(s) during the course of this assignment besides claiming an amount, equal to the contract value as liquidated damages. However, LIC reserves the right to insist vendor(s) to replace any team member with another (with the qualifications and expertise as required by the LIC) during the course of assignment.

8. Revised Payment terms, conditions, schedule, taxes etc.

8.1 Payment Terms

8.1.1 Payment Terms & Conditions

- a. No advance payment or interest will be made by LIC.
- b. Payments will be made only on vendor completing all activities as per the agreed project plan and phase completion sign off for the same from LIC.
- c. LIC reserves the right to temporarily withhold payments and impose penalty, if it is not satisfied with progress made during that period or if there is a delay in activity timelines.
- d. LIC shall make payments in Indian Rupee (INR) on receipt of invoices, after deduction of penalties and applicable taxes at source from the agreed price.
- e. Payment related objections have to be raised in writing and any such objection, if raised after 3 months from the date of release of payment, will not be entertained.
- f. The vendor is also duty bound to report to LIC about any short recovery of taxes, cess, etc. at source. Such reporting to LIC should also happen at the earliest. In case, vendor fails to inform LIC about such short recoveries of tax, cess, etc. at source, LIC will have the right to recover from the vendor all short recoveries of tax, related cess and surcharges, including interest and penalties as per the demand note of Income Tax dept. or any other govt. body or regulator.
- g. The vendor shall be solely responsible to make payment to OEM Vendors.
- h. Payment towards any additional/ Change orders for onsite will be due only if any change order is exercised and approved by LIC and delivered by the Vendor.
- i. The Amount against Penalties, if any, will be recoverable from the Payment OR from any other payment due to the Vendor OR from performance Bank Guarantee.
- j. All payments will be made only through NEFT.
- k. Following documents will be required to be submitted for release of payment:
 - i. Invoice printed on Vendor's own letterhead (with reference of Purchase order, description of goods/ services delivered, quantity, unit price, total amount)
 - ii. Sign-off from LIC for completion of each phase
- l. No other payment of any kind will be made other than the Contract Value.
- m. Expenses: It may be noted that LIC will not pay any amount/ expenses/ charges/ fees/ travelling expenses/ boarding expenses/ lodging expenses/ conveyance expenses/ out of pocket expenses other than the "Agreed Contract Value".

8.1.2 Payment Schedule

The payment schedule will be as given below:

Payment for Hardware:

- No advance payment will be made by LIC.
- The payment will be released by IT/BPR dept at CO.
- If hardware deliveries including installation of OS and all Software are received within 8 weeks from the date of Purchase Order, 80% of total cost of hardware will be paid. The balance 20% will be paid after final acceptance report after Go-live.
- If hardware is not delivered within 8 weeks, penalties will be applicable as per SLA.

Following documents will be required to be submitted for release of first payment.

- Invoice for the 80% cost as the case may be (with reference of Purchase Order for delivered quantity, unit price, total amount).
- Delivery Challans "Proof of Delivery" in original
- Certificate by the bidder indemnifying the Corporation against Violation of Copyright and Patents.



- Certificate duly signed by Assistant Secretary (or a higher ranking official) for installation of the OS and Directory Services Software

Following documents will be required to be submitted for release of second payment after the complete implementation of the solution and Go-live.

- Invoice for the balance 20% cost as the case may be (with reference of Purchase Order for execution, description of services delivered, quantity, unit price, total amount).
- Final Acceptance report duly signed by Assistant Secretary (or a higher ranking official) at CO (IT/BPR) Mumbai and by the vendor's authorized representative.

Payment for Software and Implementation Charges :

- The payment will be released by Central Office, Mumbai.
- No advance payment will be made by LIC.
- Eighty (80) % of the cost of software or license cost shall be released against full delivery and installation of the Operating System and Directory Services Solution, of all the latest Versions/ updates of software and other related items like accessories and manuals (if any).

Following documents are required to be submitted for release of payment

- Invoice for 80% cost (with reference of Purchase Order/ Contract for execution, description of services delivered, quantity, unit price, total amount).
- Delivery Challans "Proof of Delivery" in original.
- Certificate by the bidder indemnifying the Corporation against Violation of Copyright and Patents.
- Installation Certificate of OS and Directory Services duly signed by Assistant Secretary (or a higher ranking official) at CO(IT/BPR) Mumbai and by the vendors authorized representative
- The Balance Twenty (20) % Software licenses and 100% of Implementation Charges cost shall be paid on successful migration and complete implementation and go-live to proposed Directory Services Solution

Following documents will be required to be submitted for release of payments

- Final Acceptance report duly signed by Assistant Secretary (or a higher ranking official) at CO(IT/BPR) Mumbai and by the vendors authorized representative.

The Payment against Onsite Services (after Go-live):

Payment for the Onsite Services will be done on quarterly basis at the end of each quarter on production of the following:

- Invoice for the amount payable quarterly
- Performance report from duly signed by Assistant Secretary (or a higher ranking official) at CO(IT/BPR) Mumbai.

Payment against Annual Maintenance Contract and Support Charges

Payment for the Annual Maintenance Contract will be by IT dept at CO on quarterly basis at the end of each quarter on production of the following:

- Invoice for the amount payable quarterly.
- Breakdown Report from Central office

The Amount against Penalties if any will be recoverable from the Performance Guarantee OR from any other payment due to the Vendor.

No advance payment before Go-live or interest will be paid by LIC.



LIC reserves the right to temporarily withhold payment and impose penalty, if it is not satisfied with progress made during that period or if there is delay in activity timelines.

LIC shall make payments in Indian Rupees (INR) on receipt of invoice, after deduction of penalties and applicable taxes at source from the agreed price to the selected Vendor.

8.1.3 Incorrect invoices, under/over payment

If an invoice is found to have been rendered incorrectly after payment, any underpayment or overpayment will be recoverable by or from the Vendor, as the case may be, and, without limiting recourse to other available means, may be offset against any amount subsequently due by LIC to the Vendor under the contract in case of over payment.

8.1.4 Expenses

The Vendor will not be entitled to charge LIC for any other fees, charges or expenses (including travel and accommodation, document reproduction, transportation and courier charges, and telecommunications charges, etc.) in addition to the Charges mentioned in the Payment Schedule.

LIC is under no obligation to pay any amount in excess of the Charges mentioned in the Payment Schedule.

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