

Project Details: NAeG/14-15/00107

Project id -	NAeG/14-15/00107
Name of The Project	Virtualization using Virtual Machines for concrete and effective e-Governance framework
Category of Award Applying for	Innovative Use of Technology in e-Governance
Date of Launch	23-01-2013
Summary/Objective of the project	<p>Virtualization using Virtual Machines for concrete and effective e-Governance framework Minimum Government Maximum Governance more from less for more and more Implemented utility computing to facilitate effective e-Governance with efficient, optimized use of resources for the improved service delivery, throughput, efficiency and cost effective solutions for NLRMP MMP in Maharashtra using a.Virtualization using Virtual Machines (VM) to use single physical computer virtually as multiple computers by virtual isolated execution of virtually developed computers on the physical computer simultaneously. Developed cloud of variety of VM s of distinct OS. b.Server consolidation by installing server and client on the single physical computer to save server hardware per location c.Developed Secured Data Centre and d.Distributed ready usable VMs widely leveraging shared infrastructure govt. network NICNET Initiative for the National NLRMP related applications for the optimum use of technical Hardware, software, Network and human resources and time. Research Problem: Why this research Aim of this research is to study, use and analyze virtualization to facilitate effective e-Gov which involves efficient and optimum use of technical resources for improved service delivery, throughput, efficiency and cost effective solutions, and to provide concrete framework for e-governance in India Technique: Virtualization as concept and Virtual Machine as object Challenge: Background Pre-scenario:In around 2011,for present LRC applications Land Management Information System (LMIS), Property Card Information System (PCIS), uploading of 7/12 and property card data on district web site, Agri Census and switching over to (NLRMP) MMP e-Chawdi, e-Mutation applications, facing strong challenges for availability, operability and maintenance of software, hardware at district ,Tahsil level specifically for Red Hat Linux 7.2 which is necessarily required and no other alternative for all these applications and due to a.Server Hardware is not provided for PCIS all over state. b.Hardware provided for LMIS, PCIS provided in around 2002-03 becomes nonworking and obsolete c.New computer system are not compatible with the RH Linux Server 7.2 d.NIC district units also facing the similar problem of unavailability of compatible required hardware, software resources for RH Linux 7.2 Server and Windows System for sophisticated LRC applications of data uploading on web site, Agri Census etc This situation was adversely affecting on service delivery, throughput, efficiency and cost etc. Under this situation running and implementation of present sophisticated LRC and switching over to implementation of NLRMP with 7/12, property data uploading on district web site and Agri census appears to be a big challenge STEPS TOWARDS EFFCTIVE E-GOVERNANCE Proposed framework for effective e-Governance as below Free and open source software (FOSS) Virtualization a. Server Consolidation (to Save Server Hardware per location) b. Cloud computing (Live VMs virtually accessed by users remotely) Leveraging shared government infrastructures Proposed framework can provide a cost effective solution for e-governance by using Free and Open Access Software for development and deployment of e-governance applications, virtualization and consolidation techniques for management of e-services and cloud computing to deliver the maximum throughput enhancing the accessibility of services among remote locations. Major features of proposed framework are as under Features: Virtualization, Server Consolidation leveraging shared infrastructure NICNET, effortless deployments, easy backup & disaster recovery, software hardware portability , security, testing , R & D To achieve Adaptability, Scalability, New models of Service Delivery, Efficiency, Enhancement, User Convenience, sustainability, Leverage of shared govt. infrastructure</p> <p>SLR, TILR offices : for Property Card ,Information System(PCIS), Property Card Data Hosting on District Web Site. SDO, Tahsildar Offices: for Land Management Information System (LMIS), Agri Census, 7/12 Data hosting on District web Site, e-Chawdi and e-Mutation. NIC District Units for Technical Implementation and Support , Disaster Recovery for PCIS, LMIS, Agri Census, implementation at District, Sub Division and Taluka Level, 7/12 and Property Card Data Uploading on web site, Agri Census, e-Chawdi, e-Mutation, Unicode Data Conversion. Public: Citizens and farmers concerned with the 7/12 and property card and other Land related abstracts.</p>
Beneficiary of the project	

Details of Project Head

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Designation(5th team member)	Technicians
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Designation(6th team member)	Facility Management Engineers

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