



IntraGOV Haryana: Moving from E-Government to I-Government

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ABSTRACT

Successful implementation of e-Governance solutions are built on efficient and transparent G2G and G2E transactions. The NIC in Haryana has developed a suite of office automation application software packages, which are being implemented by different departments in Haryana government. With HarSWAN in place, state govt has realized that an integrated workflow based e-Office system for G2G and G2E communications and transactions among employees, within Haryana government and across departments has to be in place. NIC has initiated development of an IntraGOV framework integrating with e-Office suite. This paper briefly gives an overview of IntraGOV Haryana framework with perspective integration of existing e-Office applications in Haryana.

Keywords: IntraGov Haryana: A single point gateway which integrates government transactions and services, HarSWAN:Haryana State Wide Area Network, e-Office suite: Office Procedures Automation Suite of Application Software Packages

1. Introduction

The IntraGov Haryana is aimed to provide a single point gateway which integrates government transactions and services within and across the various ministries and departments as well as those between the government and its employees. The NIC has developed an Intra Government framework (IntraGOV) Framework that functions both as a complete product as well as a framework that embraces the G2G and G2E transactions and solutions within and across government departments. Different e-Office applications, developed by NIC in Haryana are operating as web enabled applications in different offices of Haryana government. The IntraGOV (Intra-Haryana) framework planned to be implemented over Haryana State Wide Area Network (State Intranet) of the state government. The existing e-Office applications are being customized and scaled onto web enabled architecture. For web enabled applications, the access to server end application will be provided through browser using proper authentication based access mechanism. Only authorized users will be able to access & operate their applications through Intra-Haryana Portal over Haryana SWAN connectivity.

2. Vision & Goal

The IntraHaryana is aimed to provide a single point gateway which integrates government transactions and services within and across the various ministries and departments as well as those between the government

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and its employees. IntraGOV Haryana will provide to the Govt. of Haryana a single window into the internal operations and services. The focus is on implementing an Integrated Portal for G2G and G2E Services for achieving e-Administration in CS Organization in Haryana Civil Secretariat,

The goal is to improve significantly the efficiency, effectiveness, accountability, and transparency in intra-department and inter-department businesses within the Haryana government and with its employees.

3. Overall Objectives of IntraGOV Haryana

The portal is being built on well proven platform independent technology, ensuring interoperability and reliability. The IntraGOV shall provide some of the following functionalities:

- *Unified View of Data:* Consolidation of existing data from different sources within/across the department and provide a single consistent view.
- *Content & Document Management:* A Module which can enable employees to create their own content and submit the same for review and publication on the portal.
- *Electronic Communication:* Building a sound internal infrastructure to facilitate electronic communication, information sharing and interaction.
- *Work flow automation:* This will help to reduce the paper movement to a large extent. Enables Controlled circulation of information within the Secretariat, District Administration. Enhances the ability and effectiveness of employees to perform their jobs. Eliminate redundant data entry throughout the organization.
- *Collaboration & Messaging Services:* like private/shared Calendars, e-Mail, Instant Messaging
- *Single Standards based Directory Service:* To maintain confidentiality of user data. Provides an open reliable reusable technology base for the future.
- *Identity and Access Management Role:* Personalized, role-based, secure access to office information for employees. Secured Access to information
- *Archival and e-Record Management:* A common repository for all the common government circulars/notifications, manuals, acts, rules etc instead of maintaining in various locations.
- *Integrate e-Office Suite of applications:* Some of the existing G2G, G2E Office Automation Applications shall be implemented in IntraGOV Haryana, to provide a unified view of the data and information, after customization and web enabling where ever required. The integration of existing G2G and G2E Applications will provide a personalized Dashboard to each Administrator and employee in the hierarchy.

As the IntraHaryana is scaled in terms of capability and infrastructure components, the vision and the strategies will be continually reassessed and the development and implementation plan amended as necessary.

4. Application Software Development Implementation Strategy

The IntraGOV Haryana Framework envisages provisioning of user-id/password based access & authentication, publishing all Rules, Acts, Instructions, and integrating e-Office Suite applications. The development and implementation of e-Office application software packages in Haryana Civil Secretariat is at various stages. The status of 18 numbers of G2G and G2E software packages is appended in Appendix-I.

The project is technology intensive, therefore, in addition to in-house s/w development team, the requirement of services from appropriate technology partners have been planned, technology support on the software tools, being used for software development and deployment, and standardizing application for the state level etc. Keeping in view the need for bringing the Administrative Process Re-engineering and amendment in manual of services records, a Gap analysis is being carried with the existing e-Office Suite of Haryana

As the Software development is an evolving activity, therefore, it is likely to be continued with the requirements also emerging, in near future. The outsourcing for some of the activities in the Software Development Process is also envisaged, by hiring appropriate technical manpower from the reputed agencies, engaged in the area of software development and customization to fit in ambit of IntraGov.

5. Phasing of Project development & Implementation

Assuming that the ICT infrastructure and Intranet Governance Structure will be in place, a phased plan has been prepared for the implementation of the project, starting with a pilot implementation, for meeting all the deliverables for a complete automated Governance through IntraHaryana Portal. Some of the phases may overlap. IntraHaryana will be implemented progressively as there dependencies on the pre-requisites to be fulfilled. The project is divided into following four phases:

Phase-0: June 02, 2008: The Proof-Of-Concept (POC) of IntraGOV Haryana Framework has been developed with the existing functionalities and integrated applications namely: CeFMatIS (Centralized File Movement and Tracking Information System), OGIS (Online Grievances Information System), WebPIS (Personnel Information System), Employee’s Pay slip and GPF Information, Existing Document & Content Management Capabilities of IntraGOV Framework.

Phase-I: Two Months : During this phase, the pilot Implementation of the IntraGOV Haryana Framework for CS Office at Haryana Civil Secretariat has been initiated. Capacity Building exercise of staff posted in CS branches has been started.

Phase-II: Two Months: Development/Customization/ Scaling-up of the IntraGOV with additional functionalities

Phase-III: Five Months: Scaling-up of the IntraGOV for Government of Haryana.

Phase-IV: Roll-out, Implementation, Handholding and Replication. This phase would be of three years. During this phase, yearly roll-out, implementation, handholding and replication activities in other Departments & Districts will be taken-up. An empanelled roll-out agency will be brought in for yearly roll-out, implementation and handholding. The Application S/W maintenance & Support Activities will continue during this phase.

Pre-Requisites for the Pilot Implementation of IntraGov Haryana

Infrastructure	Governance Model	Other activities
Scanning Units for office of Chief Secretary	Establishment of a Governance Structure	Needs Assessment
ICT Infrastructure	Steering team for IntraGOV	Training and Awareness Formulation
24 x 7 services	Necessary policies and guidelines	
Security	Unique Naming Structure	

In Haryana Civil Secretariat, following 32 branches work under the control of Chief Secretary :-

Accounts	Issue Section
Accounts and Partition	Library
Ad. O-I	New Group Insurance Scheme
Ad. O-II	Political and Parliamentary Affairs
Administrative Reforms	Protocol and Publicity
Cabinet Section	RVA Section
Cash Section	Record Section
Defense -I	RE-Organization
Defense -II	Research Unit
Delay Checking Unit	Services-I
Establishment-I	Services-II
Establishment-I	Services-III
General Services-I	Staff Inspection Unit
General Services-II	Training
General Services-III	Vigilance-I
Grievances	Vigilance-II

Apart from this, offices of the Chief Minister Haryana, Finance Department Haryana and the Branches of various administrative secretaries also operate from Haryana Civil Secretariat. In order to implement the IntraGov Haryana requisite ICT infrastructure is being established..

6. Creation of Secretariat IntraGov Portal Maintenance Cell.

This cell be responsible for uploading the contents on the portal and assist various branches in operation of the portal. This cell will work under the direct supervision of Sr. officer and will report the progress of implementation of the portal to the Chief secretary on regular basis. Apart from other non technical staff such as Supdt., Assistants and Clerk, this cell will have at least two job Junior programmers. This manpower will be sufficiently trained by NIC to provide on the spot help, sort out the trivial problems and give training to the staff of the civil secretariat on portal operations. This cell will help in defining the workflows for the proposed IntraGov portal in consultation with concerned branches and suggest necessary business process reengineering to achieve the work flows. They will take the necessary permission from the state government for the changes in the processes and issue necessary instruction in this regard. This cell will act also as capacity building cell as far as the IntraGov is concerned.

The application software and database server required to operate CS IntraGov Haryana have been hosted on the NIC State Data Center located at 9th Floor Haryana Civil Secretariat and are accessible on the secretariat Internet. Though secretariat establishment has provided computer systems to every branch working in the secretariat but in order to access the application from the various branches and upload the content from a central place of designated cell requisite basic hardware being put in place in each branch.

For Adoption of latest technology, regular training programmes are being organized in-house at NIC-Haryana State Centre. The officials are being trained on computer fundamentals, office automation suite and usage of internet and e-mail. Specific training on application software packages is being imparted to the staff.

Technology: The IntraGOV Haryana is being developed/customized using Open Source technologies like Zope – Application Server, Plone- Content Management System, and Python Programming Language/TAL (Template Attribute Language) scripting Language. Other pieces of the technology stack include ZOPE, ZODB, PostgreSQL relational Data Base Management System. A web server and Servlet engine (Apache)

and Tomcat, and other useful libraries.

Portability: The IntraGOV is technology neutral web-based software that can be deployed on Linux/Windows platform.

Interoperability: It is interoperable and external software applications will be seamlessly integrated.

Scalability: The IntraGOV can be scale to support any size of organization by the proper configuration.

G2G/G2E Applications: All the applications will be web enabled.

Front-end: applications will be developed/customized on heterogeneous platforms like Java, J2EE, Tomcat, Zope/Plone, .Net Technology (MS-ASP, ASP.Net) architecture.

Back-end: RDBMS will be PostgreSQL, MS-Sql Server, My-SQL, Oracle etc.

Hosting: The IntraHaryana framework will work on Haryana State Intranet Environment. The IntraGOV for Haryana and integrated applications will be hosted on central servers in NIC Haryana State Data Centre at Haryana Civil Secretariat.

7. Concluding Remarks

The Integrated IntraGov Haryana is one of the very prestigious e-Governance project and complex in nature as it will provide the interface of various software applications being implemented in the organizations in integrated manner on authenticated as well as authorization basis. Therefore, the successful implementation of such a project not only requires a very active participation of all the main stakeholders viz. Establishment of Chief Secretary Office, Deptt of Administrative Reforms and Public Grievances, NIC at national and State level, and State Governments of Haryana, with appropriate dedicated Committees and Teams constituted at different levels for speedily addressing the various Project implementation requirements. To ensure that all stakeholders work as a cohesive team rather than disjoint systems, it is essential to formally define beforehand, with consensus, their respective roles and responsibilities and commitment to each other. They will have to always maintain a clear understanding about their mutual obligations so that no conflict of interest ever comes in the way of the larger cause of smooth and successful implementation of the projects.

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Ghan Shyam Bansal is working as State Informatics Officer, NIC Haryana State Centre. He has 28 years of experience in the conceptualization, planning, development, deployment and implementation of various key initiatives in Haryana in the field of ICT & e-Governance. He received a M.Sc. degree in M. Statistics with specialization in O.R. and a Post M.Sc. diploma in Computer Science from K.U. Kurukshetra. He has received a dozen national e-Governance awards and published many technical papers & case studies on e-Governance projects of Haryana State in national and international conferences He has a deep understanding of the issues and problems related to ICT implementation in State Government and experience in finding innovative solutions to such problems in field conditions.

Dharamvir is an officer of Indian Administrative Service, Haryana Cadre, 1973 batch. He has worked as Principal Secretary to Government of Haryana, Department of Information Technology, Technical Education, PWD (B&R), PWD (PH), Revenue & Disaster Management, Home & Administration of Justice to name a few. Currently he is holding the position of Chief Secretary to Government of Haryana. He has obtained a Master's Degree from IIT Kanpur.

Appendix

Appendix-I: Status of e-Office suite implementation in the office of Chief Secretary, Haryana under IntraGov Haryana initiative

Item #	Title of the e-Office Application Software	Status of Implementation
1.	IntraGov Haryana for CS Organization.	<ul style="list-style-type: none"> The POC of IntraGov Haryana has been demonstrated to JS AR and other officers. Project proposal has been prepared, got internal approvals from NIC-Hq. & GoHr. The approved proposal has been submitted to Secretary Deptt. Of AR & PG, Govt of India for approval and transfer of requisite funds, so that the development work can be speeded up.
2.	Centralized File Movement and Tracking Information System (CeFMaTIS)	<ul style="list-style-type: none"> The S/W is operational in CS Office, Circulation Branch, and Issue Branch. The training has been imparted. An exclusive server has been installed for CeFMaTIS. The procedure for managing and implementing the S/W has been documented. Upto 1000 files/letters are being handled by S/W per day
3	Library Automation System (e-Granthalya)	<ul style="list-style-type: none"> Customized system operational in HCS Library Training completed, One time Data Entry of books has been done Bar Code generation, reading and directly interfacing in system has been incorporated Web enabled Interface for access to Library books has been incorporated. Software module for Issuing of New Id cards cum library cards with Bar Coded member's ID generation completed. The barcode member's ID pasted on ID Cards and thereafter lamination of the same has been started Web interface linked on state's Official website.
4	Online Grievances Information System (OGIS)	<p>For CS Office, a facility has been provided in CeFMaTIS to manage the grievances received in CS office, their marking to concerned officers and generating specific reports.</p> <ul style="list-style-type: none"> The OGIS, a web enabled workflow based system, is meant for HODs/DCS and others. OGIS is being implemented by Lokayukta and Police Hq. OGIS is scaled up for intraGov. To implement, a Central Grievance Officer has been designated at office of Director Grievances and a special cell has been created.
5	Web Enabled RTI-MIS with G2C Interface	<p>For the Web enabled RTI-MIS software, following modules has been developed:</p> <ul style="list-style-type: none"> For accessing, login/authentication by authorized official, Central RTIC MIS Cell PIO and Departmental designated PIO. The web interface to file RTI application in Form -A, generation of unique ID, Issuing of Acknowledgement receipt alongwith a print of filled-in Form- A. Downloading and forwarding of received form-A by RTI MIS Cell PIO to Departmental PIO Updating of status on the website. Generation of Form-B Availability of status to RTI Information Seeker / authorized officials. The RTI-MIS Cell with a designated PIO and operation staff & equipment is being established. The Application S/W being audited for security clearances Launching of G2C interface of RTI-MIS software is planned.

6.	Website for CS Organization http://csharyana.gov.in	<ul style="list-style-type: none"> • An exclusive website for CS organization is being developed. All major functionalities have been developed. • The domain name http://csharyana.gov.in has been registered with the national domain registrar. • Information under various links of the website is being added. • The site is being audited for security clearance. Thereafter it will be formally launched.
7.	Web Enabled Vigilance Cases MIS	<ul style="list-style-type: none"> • The workflow study has been conducted at State Vigilance Bureau. • The Software has been developed, tested and the implementation has been started
8	Web enabled Government Surplus Land Monitoring System	<ul style="list-style-type: none"> • The software has been developed as a G2G web enabled software, to meet the state level requirements. The software has been launched to all Dy. Commissioners for starting the database building and monitoring. • Micro level details have been received from DCs by the office of Comm. Coord, which will be incorporated in the system for local level monitoring by DCs.
9	Web Enabled Personnel Information System	<ul style="list-style-type: none"> • This is a comprehensive Human Resources MIS package, which capture complete service records details of each employee alongwith his photograph. The system is well tested and being implemented by various departments.
10	Web enabled Village Directory of Development Works	<ul style="list-style-type: none"> • To capture the each development work taken up at village level during last 03 years, the software was developed and made available to all DCs. A significant data has been generated for a number of Districts. • Development of the remaining modules of web enabled system including various MIS reports are under progress
11	Web enabled GPF Advance & Withdrawal MIS	<ul style="list-style-type: none"> • The System study has been completed at Secretariat and FD. • The software running at NIC-DARPG Cell has been studied and collected. • The major components of the software have been customized as per Haryana requirements. • Approval from AG Haryana is being taken to use the GPF database. • The existing Payroll system is being linked through customization
12	Web enabled MIS for Projects, Issues, Proposals Monitoring (CSPMIS)	<ul style="list-style-type: none"> • This software has been developed for the use by CS, committee of secretaries, DCs, Divisional commissioners, HODs. • The basic data feeding is at the level of DCs, wherein DCs can feed progress of major projects, any Issues, Proposals which are to be considered by CS/Committee of Secretaries. • This is secure G2G workflow software.
13	On-line leaves MIS	<ul style="list-style-type: none"> • This is a secure web enabled leaves management system for all kinds of leaves, developed and implemented by NIC-Hq. • The Haryana requirements have been discussed with S/W team and the Work has been initiated at NIC-Hq for customization for Haryana IAS officers in its current form • This will be a part of Intra-Gov Haryana for CS organization.
14	Use of e-mail facility for intra-office as well as inter-office communication.	<ul style="list-style-type: none"> • The official e-mail IDs and the email IDs actually being used by Administrative Secretaries have been consolidated under an e-Group of Admin. Secretaries. • An e-Mail Directory has been published and circulated to all Admin. Secretaries and HODs. • The e-mail directory is also made available on-line through e-mail application.

		<ul style="list-style-type: none"> • The e-groups have been created for DCs, DRDAs, HODs and others. • Extensive usage of e-mail in official communication is started.
15	Issuing of Digital Signature Certificate to Administrative Secretaries and HODs through Department of Information Technology	<ul style="list-style-type: none"> • DSCs have been generated for 15 secretaries after completing all necessary formalities with NICCA at New Delhi. • DSC forms in respect of remaining secretaries are being got filled. • On-site training to individual secretaries on usage of DSCs in emails and documents signing has been planned and modalities worked out.
16	Pay Roll Processing System (PRPS) with web Interface	<ul style="list-style-type: none"> • PRPS involving processing has been implemented in Secretariat. • A web interface has been developed to provide access to individual employee on pay slip, arrears details and receipts through secure access on IntraGov Haryana.
17	Web enabled Court Cases Monitoring System	<ul style="list-style-type: none"> • The system helps in monitoring various stages of departmental individual cases and directions of hon'ble Courts. • System is being scaled up to web interface for integrating in IntraGov Haryana.
18	Employees GPF Information System	<ul style="list-style-type: none"> • This is a web enabled information system, which provide access to individual employee on his/her annual GPF statement, Monthly deductions, advances, interest and current balance in GPF account • Each employee has been provided a PIN number for security reasons.