

Service and Payroll Administrative Repository for Kerala (SPARK)

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ABSTRACT

SPARK is a G2E web-based personnel administration and accounts software for the Government of Kerala covering 5.25 lakh employees. Permanent employee numbers for all employees are allotted through the system. The system addresses all requirements in service, salary, income tax and accounts matters. A centralised data base helps in quick decision making and applying rules and regulations uniformly for all employees. Activity-driven procedure-linked data capture is ensured. All reports are generated in PDF format. Provision is available to send alert messages to employees when payments are credited. Provision to generate identity cards is another facility.

The system has been developed with a view to cater to the administration, payroll and accounts matters of all government establishments. A centralised, integrated, computerised personnel and payroll information system will help the departments to get details of any employee immediately, achieve highest level of transparency in dealing with the employees, achieve more consistent application of rules, etc.

Changes made in one module will be reflected in all related areas of activity. On the payroll side, accurate and automatic payroll processing is facilitated. Rules and regulations are uniformly applied to all employees. This eliminates complaints and achieves better employee relations.

The software covers activities in the following areas – system administration, service matters, salary matters, income tax matters and accounts matters.

Spark Application Architecture

The platform/technology used in the project: Windows 2003 Server, SQL Server 2000, SQL Reporting Services, ASP.NET

The SPARK Datacenter is a multi-layer architecture. It has been designed to adhere to industry standards and is optimised for hosting SPARK application. The architecture is represented in the following figure. The SPARK Datacenter is the core of the SPARK application infrastructure. This will be used to house the main servers. These servers are protected from the other zones by firewalls.

Brief Description of the Application

- A G2E web-based personnel administration and accounts software for the Government of Kerala covering 5.25 lakh employees
- Permanent employee numbers for all employees
- Addresses all requirements in service, salary, income tax and accounts matters
- Centralised data base helps in quick decision making and applying rules and regulations uniformly to all employees
- Activity-driven procedure-linked data capture
- All reports in PDF format
- Provision to send alert messages to employees when payments are credited
- Provision to generate identity cards

Vision and Objective of the Project

- The system has been developed with a view to cater to the administration, payroll and accounts matters of all government establishments.
- A centralised, integrated, computerised personnel and payroll information system will help the departments get details of any employee immediately, achieve highest level of transparency in dealing with the employees, achieve more consistent application of rules, etc.
- Changes made in one module will be reflected in all related areas of activity.
- On the payroll side, accurate and automatic payroll processing is facilitated.
- Rules and regulations are uniformly applied to all employees.
- Eliminates complaints.
- Achieves better employee relations.

Summary of the Project

The software covers activities in the following areas – system administration, service, salary, income tax and accounts matters. The following are the detailed objectives in each area of activity.

System administration

- Enrollment of users and assigning permissions
- Maintenance of look-up tables (masters)

- Defining slabs and rates for various entitlements
- Routine system back up

Snapshot of the software with the options under 'Administration' is given below:



Service matters

- Permanent employee number to all.
- To create and maintain existing information in service books.
- Additional information can be collected and entered.
- Procedure-linked activity-driven updating of routine service matters-
- Generates office orders where ever necessary.
- Maintenance of other details like qualifications, awards obtained, trainings attended, nominee details, family details, departmental tests passed, disciplinary actions taken, annual property returns, performance reports and leave account.

Following are the snapshots of the software showing details when the permanent employee number is keyed in and showing the options under service matters.


SPARK - Employee Personnel Details - Microsoft Internet Explorer provided by Wipro Limited


Employee Details

SPARK

Personal Probation Training Awards Leave Account Perf.Report Quarters Service History
 Recruitment Family Details Quali. Services Discip. Action Leave Availed Prop>Returns Deputations Present Salary
 Qualification Dept. Tests Regularisation Nominees Leave SurrenderBenefit Details Loans

Personal memoranda Present service details Contact details

Permanent Emp. No. 100041 Subaida Beevi Name Subaida Beevi M Jr 


Departmental Gen. No, if any Upload Signature  Upload photo

(Applicable For Police, Forest, fireforce Departments) Name PEN

Personal memoranda


Sex Female Nationality India Date of birth 02/05/1951
 Father's name Asanar Pillai Mother's name Date of superannuation 31/05/2008
 Blood group O+ Religion Islam Caste Muslim
 Category Gen Ex-service men? No Physically handicapped No
 Nature of handicap PAN number
 Ration card number 1102004312 Voter id card number KL/20/134/021270 Marital status Married
 Spouse's name K S Mohammed Shareef Is inter religion/caste No Spouse's religion Islam
 Spouse's caste Muslim Is spouse employed No Spouse employed in Retired, Administration, E
 Identification marks A mole on the left fore arm A mole on the middle of the chest Height (cm) 160

SPARK- Service and Payroll Administrative Repository for Kerala - Microsoft Internet Explorer provided by Wip...



Service and Payroll Administrative Repository for Kerala

Establishment Interface



Administration Service Matters Salary Matters Income Tax Accounts Change password Sign Out

Increment Sanction

Department Finance Designation Account Office Secreta

Choose Scale Type : Promotion Appointment to higher post Month Septem

List of eligible employees for sanctioning increment

Emp.Code	Basicpay	Amount	Incr.Date
100068	8250	0	01/04/2006
100095	8025	0	01/05/2006
100107	8725	0	01/09/2006
100120	8025	0	01/05/2006
100159	6625	0	31/07/2000
100163	8025	0	01/04/2006
100183	8925	0	01/07/2006
100223	7800	0	01/06/2006
100229	6275	0	31/07/1999

Order No :
 Order Date : 20/09/2006

NIC Driving the Next Generation Government

Salary matters

- Maintains data dictionary of various rates, slabs, etc., with respect to DA, HRA, CCA, allowances, etc.
- Provision to define bill types, acquaintance types, bank details, etc., of each office
- Initialisation of codes and rates in respect to various allowances, deductions and loan items
- Automatic calculation of basic pay dependent allowances and professional tax
- Monthly salary processing for selected employees bill-wise
- Prepares salary bill (inner and outer)
- Prepares schedules for all deductions and loans
- Prepares acquaintance and individual salary slip
- Salary arrear and DA arrear processing with reports such as bill inner and bill outer
- Provision to make information available to employees through web interface
- Provident fund account information

A snapshot showing the options under salary matters is given below:

The screenshot displays the SPARK web interface. The top navigation bar includes: Administration, Service Matters, **Salary Matters**, Income Tax, Accounts, Change password, and Sign Out. The 'Salary Matters' dropdown menu is expanded, showing the following options:

- Est. Bill Types
- Present Salary Allowance
- Deductions >
- Loans
- HRA/CCA during LWA
- Changes in the month
- Salary Processing >
- Bills and schedules >
- Bonus >
- Quarters
- Prof. Tax Computation
- Festival Advance
- Co-operative Recovery >
- Provident fund >
- Stop/Release Salary >
- Emps. in PR Scale
- Manually Drawn
- Pay revision
- Stop HRA/CCA on HPL
- Exempt Recovery
- Batch Diasnon

The main content area shows 'Salary Details' with a table of deductions:

No	Deductions other than LOANS/ADVANCES	Amount	Details	
0	Festival Advance	100	Festival Advance	Delete
	<--Select-->			Insert

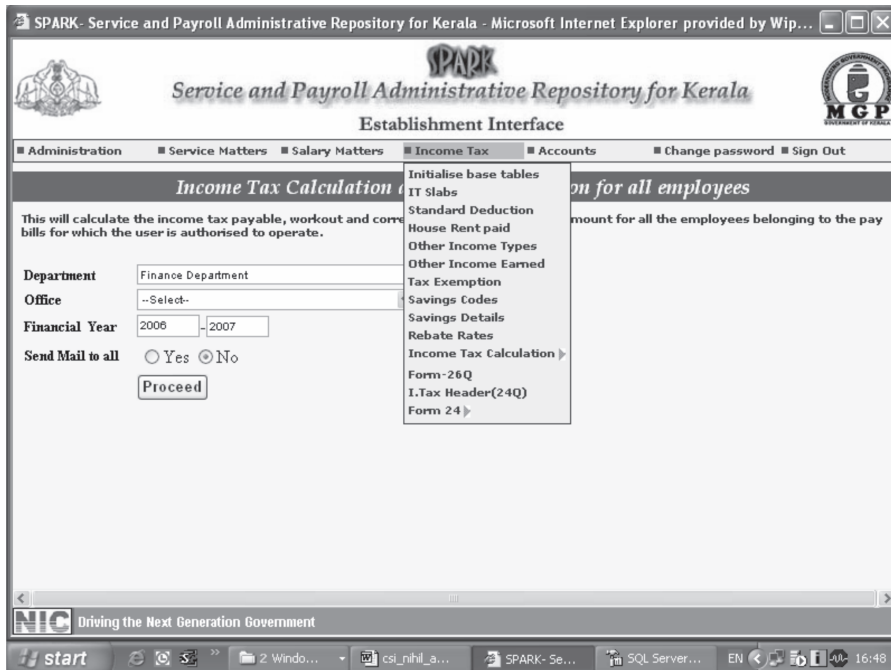
At the bottom of the interface, there is a 'Confirm' button and a 'Cancel' button. The footer includes the NIC logo and the slogan 'Driving the Next Generation Government'.

Income tax matters

- Initialises base tables for income tax calculation
- Fixing slabs and rates for calculation

- Updating savings details
- Updating other income earned
- Prepares due drawn statement
- Income tax calculation and automatic updating in deductions
- Form 16 and Form 24 generation in printable and electronic format

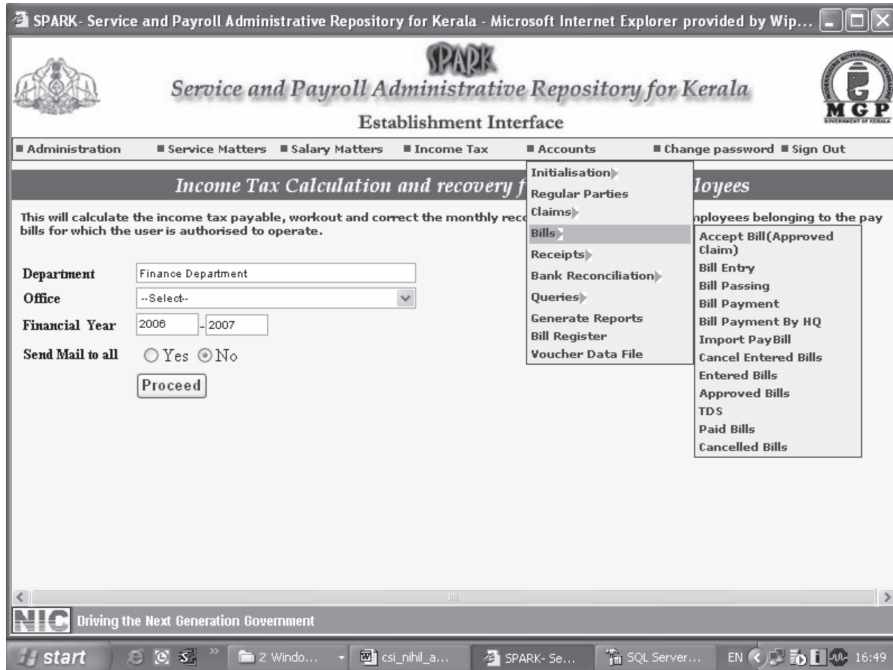
The following is a snapshot showing the options under income tax.



Accounts matters

- Initialisation of base tables, bill details and cheque details
- Updating budget allocation for each head of account
- Bill entry, bill passing and payment through cheques
- Importing salary-related bills into accounting modules
- Generation of sanction orders, TDS and periodical reports
- Online queries for monitoring expenses

A snapshot showing the options under accounts follows:



Solution Including Technology Provided to Meet the Challenges that Existed

- A centralised data base for the whole state
- Unique permanent employee number for all
- Necessary government orders issued by the Government of Kerala
- Connectivity through SWAN
- All reports generated in PDF format
- Offline data entry package for easy data entry

Benefits Accrued

- Easy and speedy pay bill preparation.
- Automatic generation of employee identity card.
- Employees who are unaware of what is happening on their claims submitted will be notified through automatic alerts from the system.
- Most of the salary, income-tax- and GPF-related details are available online. This will reduce the distance between head office and remote offices to a mouse click.

- The administration will be benefited as 90% of the activities are carried out through the system.
- Results in transparency and smart administration.

Replicability of the Project

The project has been further modified as a product entitled Personnel administration and Accounts for Central Establishments (PACE) for implementation in any government establishment.

Current Status of the Project

The system has been successfully implemented in the Kerala Government Secretariat and is in constant use for the last 8 months. The initial data entry is in progress in the following departments.

- High Court of Kerala
- Police
- Public works
- Revenue
- Commercial taxes
- Vocational higher secondary education
- Technical education
- General education

The generalised version (PACE) is fully implemented in the NIC Kerala State Unit, Thiruvananthapuram. It is also being implemented in CAT Ernakulam, NIC Karnataka, Tamil Nadu, Andhra Pradesh and Gujarat.

Future Development Plan in the Project

1. Pension data base maintenance
2. Forecast the expenses on wages for planning
3. What-if analysis on the expense on wages for various variations on allowances
4. Analysis on pensioners for the next 5–10 years