

4G Identity Solutions

Corporate Profile



Delivering World's Biggest Civil ID Project | World's Fastest De-duplication | World's Largest Corporate ID

Aadhaar Excellence Award 2011 | ETNow Leaders of Tomorrow Award 2011 | ID World ID Outstanding Achievement Awards 2010



About 4G Identity Solutions



- Pioneer (since 2001) & Global leader in providing **large-scale Identity Management** Solutions using biometrics
- End-to-End Identity Management **Solutions provider** & **System Integrator** in Civil ID, Homeland Security & Law Enforcement for Government, Corporates, Banking and Defense
- Re-defined ID Management business space by providing thought leadership and proof of concepts that led to **some of the world's largest Civil ID programs**
- **Executed** many World's largest Identity Management Solutions for federal governments, multilateral agencies and top notch corporates
- Prestigious Role in **World's Biggest Civil ID Project** – India's Unique ID / Aadhaar



4Gid Core Expertise



- **Biometrics:** Automated methods for recognizing individuals based on biological and behavioral characteristics
 - Fingerprint Biometric Technology
 - Iris Biometric Technology
 - Face Biometric Technology
 - Other Biometrics: Voice, Veins, Hand Geometry, DNA, Retina
- **Smart Cards:** Solutions for Securing Identity & Access
- **Solutions for e-Governance**
 - Identity Management Ecosystem
 - Solution Design, Development & Implementation
 - Intra & Inter Department Integration for Centralized ID management
 - Unique ID integrated Solutions
 - Seeding
 - De-Duplication
 - Trusted Database
 - Last-Mile Authentication
 - Public Service Delivery Infrastructure (PSDI)



Certifications of 4Gid



- **SEI CMMi Level 3** - Software Engineering Institute (SEI) Capability Maturity Model for Software (CMM) Level 3
- **ISO 27001 : 2013** for Security Management System.
- **ISO 9001 : 2015** - International Standards Organization (ISO) Quality Management System Standard.
- **STQC / UIDAI Certification** for Biometric Enrollment Devices
- **NIC -SCOSTA** Certification for Smart Cards
- **FBI** Certification for Biometric Devices
- **NIST** Testing and Certification for ABIS / AFIS



4Gid Centre of Excellence



4Gid **Centre of Excellence** has all generations of biometric devices, all generations of algorithms over a decade up and running.

Only 4Gid has the **largest biometric testing database in the world** with more than 100 million multi-modal (Finger, Iris & Face) biometric records which enables to test and implement large scale identity projects with ease.

4Gid Centre of Excellence is equipped with best ever biometric data centre configuration with about 33 Intel Xeon Quad Core Dual Processor blade servers with storage capacity of more than 35 terabytes.



Our Unique Offerings



Solutions				
Government Solutions	Enterprise ID Solutions	Law Enforcement Solutions	Electronic National Access Management	Banking Solutions
<ul style="list-style-type: none"> • Public Service Delivery Infrastructure • Public Distribution System • Welfare & Entitlement • National ID • Election ID 	<ul style="list-style-type: none"> • Recruitment • Time & Attendance • Access Control • Visitor Management 	<ul style="list-style-type: none"> • AFIS • ABIS • Live Scan • Mobile ID • Prisons • Courts 	<ul style="list-style-type: none"> • Immigration • eVisa • ePassport • Automated Border ID 	<ul style="list-style-type: none"> • Authentication • Micro ATM • Biometric ATM • Financial Inclusion • Bank On Wheels

Services	Products	Suites
<ul style="list-style-type: none"> • Enrollment • De-duplication • Authentication • Consulting • Data Management 	<ul style="list-style-type: none"> • 4G Multi-Modal Identity Platform • eAccess • Enrollment Devices • Authentication Devices • Smart Cards 	<ul style="list-style-type: none"> • Corporate ID • Recruitment ID • Health ID • Education ID • Airport ID



Trail Blazers in Identity Management

- Biometric Enabled eVisa Issuance System for Worlds Largest Visa Processing Customer
 - **40+ countries & 700 Locations**
- Subject Matter Expert, Biometric Solution Provider, Highest Device Supplier & Leading Enrolment Agency for India's Unique ID project
 - **1.2 Billion Residents Unique ID project**
- The world's fastest Biometric de-duplication of 56 million citizens
 - **6.2 Quadrillion matches in record time of 60 days**
- The world's first Unique Citizen ID Database
 - **90 million citizens**
- The world's First Multi-Modal biometric Civil ID project
 - **10 fingers (4-4-2), 2 Iris & Face**
- The world's Largest Coastal ID Project
 - **7,517 km, 12 million citizens**
- The world's largest corporate ID system
 - **820,000 employees**



Biometric eVisa Issuance System - Large Visa Processing Company

Background

Design and development of Multi-biometric (Fingerprint, Iris and Face) eVisa Solution, Deployed across the World over 40+ Countries & 700 Locations.

Solution Highlights

Highly configurable biometric system that can implement mission specific workflows at server level with respect to

- Selection of biometric modalities
- Selection of biometric device
- Configure quality check parameters and thresholds
- Data packaging: CBEF/XML/NIST
- Country Specific encryption & Interfaces with Respective Missions
- ICAO / ISO / NIST Compliant

Project Photos



Immigration, Visa and Foreigners Registration & Tracking (IVFRT) System

Background

Immigration, Visa and Foreigners Registration & Tracking (IVFRT) Project for Ministry of Home Affairs, Government of India. IVFRT System enables Biometric enrolment of the overseas travelers and verification of their identity at different Immigration check points when they arrive India.

Solution Highlights

- Supply, Installation and Integration of biometric technology for IVFRT system.
- Registration of Foreign Nationals at Indian High Commissions / embassies at the time of Visa Application
- Verification of Identity at Port of Entry in India
- Implemented across 20+ Countries

Project Photos



World's largest Civil ID – UID / Aadhaar

Back Ground

The world's largest biometric identity exercise and India's Unique ID/ Aadhaar project was initially conceived by the Planning Commission, Government of India, as an initiative that would provide identification for each resident across the country and would be used primarily as the basis for efficient delivery of welfare services. It would also act as a tool for effective monitoring of various programs and schemes of the Government. The UID number provided by Unique Identification Authority of India (UIDAI) will serve as a universal proof of identity allowing residents of India to establish their credentials anywhere in the country. 4Gid has made a significant contribution to this World's largest Biometric Identification System in different aspects right from the conceptualization stage till deployment and execution.

4Gid Role in UID / Aadhaar Project

Biometric Subject Matter Expert: 4Gid has provided its experience in deploying large scale multimodal biometric projects right from conceptualization, biometric technologies selection and design stage of the UID project. 4Gid also helped UIDAI in defining and validating the biometric device specifications, vendor neutral device interface, enrolment software and enrollment processes, biometric enrollment best practices, biometric image quality parameters and accuracy limits.

First Proof of Concept: 4Gid developed and deployed the enrollment application for the first proof of concept of UID.

Biometric Solution Provider (BSP): 4Gid along with L-1 Identity Solutions and Hewlett-Packard (HP) is one of the three BSP consortiums providing De-duplication and Authentication Solutions.

Biometric Devices Supplier and Empanelled Enrollment Agency: STQC – UIDAI certified biometric device supplier and enrolment of 16 Million Residents across 12 states in India

Project Photos



The world's fastest de-duplication of 56 million citizens

Back Ground

Customer: Government of Andhra Pradesh, India

Technology: Iris Recognition Technology and Demographic Matching System

Project: Targeted Public distribution System (TPDS) for delivery of subsidized food to poor

Objective: To identify the duplicate and shadow beneficiaries in ration card database

Database: 56 million Subjects Iris and 82 Million Subjects demographic data

Solution Highlights

- De-duplication of Iris and demographic data captured at the time of issue of ration cards.
- 6.26 Quadrillion Iris matches in record time of 60 days
- 1 Billion Iris matches per second
- Creation of Integrated Citizen Data Hub by integration of PDS, Pensions & Housing Departments
- 1,545,951 duplicate and ghost ration cards identified and deleted.
- 1,651,466 bogus pensioners identified.
- 1,288,670 bogus housing beneficiaries identified.

Impact

Government : Hundreds of millions of dollars leakages in the form of duplicate and shadow beneficiaries plugged, Creation of trusted UID database of beneficiaries

Beneficiaries : Benefits extended to excluded beneficiaries, Trust on Government Service Delivery

Industry: Proved applicability of Biometric Technology to large scale civil ID programmes, Proved scalability of Iris Recognition Technology to Millions of subjects

Project Photos



The World's First Unique Citizen ID Database

Back Ground

Customer: Government of Andhra Pradesh, India

Technology: Iris Recognition Technology

Project: Targeted Public distribution System (TPDS) for delivery of subsidized food

Objective: Real-time Identification of beneficiary across a database of 90 million while registering into the Ration Card Beneficiary system to avoid duplicate registrations.

Database: 56 million Subjects Iris and scalable to 90 million subjects

Solution Highlights

- Creation of Unique Citizen ID database scalable to 90 Million residents
- Creation of Real Time 1:N Identification System with server side response time of less than a second
- Supports real time identification across hundreds of locations with client side response time of less than a minute.

Impact

Government : Effective Beneficiary Data Management system that ensures One ID for One beneficiary

Beneficiaries : Trust on Government Service Delivery

Industry : Proved scalability of Iris Recognition technology for Real-time Identification across Millions of subjects

Enhanced Public Services:

- Enrollment of new beneficiaries
- Addition / Deletion of member in a Ration Card, Splitting of families
- Change of address, Change of Fair Price Shop
- Issue of Caste Certificate, Residence Certificate, Income certificate etc.

Project Photos



The World's First Multi-Modal biometric Civil ID project

Back Ground

United Nations World Food Programme, India country office (UNWFP) on behalf of the Government of Orissa has taken up the project to strengthen the infrastructure and systems of the Public Distribution System by leveraging Multimodal Biometric, Smart Card and ICT technologies for better management and monitoring of the distribution of food grains in Rayagada district of Orissa

Solution

- Data Digitization and Integration of databases
- Development and Deployment of Demographic and Multi biometric enrolment (Iris , Fingerprint and Face) Application, Multimodal biometric De-duplication
- Printing and personalization of different credentials: Laminated cards with security features and Smart Cards, Authentication solution before distribution of cards to beneficiaries
- Last mile handheld authentication solution for distribution of commodities
- Inventory Management System , Central MIS system for monitoring the PDS

Impact

Government : Strengthen the infrastructure and systems of the Public Distribution System, Foolproof Public Service Delivery System

Industry: Improved performance of Multimodal Biometric over single biometric in terms of Biometric Failure to enroll(BFTE), False Acceptance Ratio (FAR), False Rejection Ratio(FRR) and Total Cost of Ownership(TCO) of the System

Project Photos



The World's Largest Coastal ID Project

Back Ground

To provide Multipurpose Biometric Based National Identity Cards to people living along India's coastline to strengthen the coastline security as part of National Population Register (NPR). NPR is a comprehensive identity database to be maintained by the Registrar General and Census Commissioner India, Ministry of Home Affairs, Government of India (RGI). NPR Project is taken up by the Consortium of Public Sector Undertakings (CPSUs) consisting of Bharat Electronics Limited (BEL), Electronic Corporation of India Limited (ECIL) and ITI Limited (ITI) in 9 Coastal States. The project covers about 7517 kms, 12 million people living along the coastline of 9 states and 4 Union Territories

Solution Highlights

- Provides the Fingerprint Live Scan System for the Coastal ID project of India
- Provides Noise Removal Algorithms for improving the accuracy of the Biometric System

Impact

Governments : Positive Identification of residents living in Coastal Areas, Strengthen the security of Coastline

Residents : Safe and Secure environment

Industry : Applicability of biometric technologies to secure the borders

Making the fingerprint technologies work in harsh and extreme humid conditions

Project Photos



The World's Largest Corporate ID system

Back Ground

Customer: One of world's largest Petrochemical Conglomerates

Technology: Iris Recognition Technology

Project: Biometric Registration, Identification and Blacklisting System for contract labour and employees

Objective: To identify the duplicate registrations and prevent entry of blacklisted.

Database: 820,000 Subjects Iris

Solution Highlights

- Accurate and Secure Real-time Identification and Blacklisting System scalable to Millions
- Mobile Identification using handhelds
- Integration with legacy HR and Payroll systems for two way data interchange
- Deployed across 9 refineries in Cluster model with high availability, automatic failover, no single point of failure

Impact

Client: Savings of millions of dollars that was spent on duplicate and nonexistent registrations,

On time Completion of projects, Creation of System that prevents blacklisted individuals from entering any of the premises

Employees: Ensure safe and secure premises

Industry: Proven Scalability of Iris Recognition Technology with real time identification across multiple sites

Project Photos



India's first connected state-wide Criminal ID system

Back Ground

The Manual System of Fingerprint Record Keeping for Identification of Criminals has been in use in the police department for more than a hundred years. The fingerprint Bureau of Karnataka Police wanted to automate the manual system to improve performance of the fingerprint bureau and to reduce turnaround time of criminal identification. The Automation of the Fingerprint Live Scan System interconnects a string of 148 police stations which helps in speedy identification of the existing suspects, thereby enabling speedy investigation.

Solution

- Supply, installation, commissioning and configuration of Fingerprint Enrolment Devices at the police station, Enrolment Solution for electronic capture of Slap and Roll fingerprints using Live Scan Fingerprint Devices along with demographic details
- Inbuilt Quality Checks and capture of high resolution of images that are of forensic quality to allow for conclusive fingerprint comparisons (identification or non-identification decision), fingerprint classification, automatic feature detection;
- Automatic sequence checking of rolled print with respect to plain print, Inbuilt noise removal to capture high quality fingerprints, Automated real time criminal identification system that connects 148 police stations to district and central AFIS systems

Impact

- Increasing efficiency and effectiveness of crime investigation and control.
- Real time crime and criminal information System across the police stations

Project Photos



World Economic Forum



- 4G Identity Solutions has been honored as a **Global Growth Company** (GGC) by World Economic Forum (WEF) and as the **region's most dynamic and high-growth company**.
- 4Gid has been nominated as **Global Growth Company** on its **track record of exceeding industry standards** in revenue growth, **promotion of innovative business practices** and demonstration of leadership in corporate citizenship.
- 4Gid has been selected for this recognition based on its phenomenal contribution to the global society, corporate citizenship and impact on the competitive landscape of the ICT industry globally.



Awards & Recognition



Dr. Sreeni Tripuraneni receiving the **Leaders of Tomorrow Award** from Mr. N. R. Narayana Murthy, Chairman Emeritus, Infosys Technologies and Mr. Dinesh Agarwal, Founder and CEO, *IndiaMART.com* on 28th November 2011



Dr. Sreeni Tripuraneni receiving the **Aadhaar Excellence Award** from Mr. Nandan Nilekani, Chairman–UIDAI and Mr. R.S. Sharma, Director General - UIDAI on 29th September 2011



Dr. Sreeni Tripuraneni receiving the **ID World Outstanding Achievement 2010** award from Ms. Sophie B. de la Giroday, President of Wise Media and Mr. Detlef Houdeau, Senior Director, Business Development Identification of Infineon Technologies on 16th November 2010



Awards & Recognition



4Gid is **ranked 27th by Deloitte** in its list of Technology Fast 50 as the fastest growing technology company for the year 2013

Mr. Ramakishan Madhineni & Dr. Lakshmi Tripirneni, Managing directors of 4G Identity Solutions receiving the award , from Deloitte on 19th October 2013.



4Gid is **ranked 23rd by Deloitte** in its list of Technology Fast 50 as the fastest growing technology company for the year 2012 with a growth rate of 248% for the period of evaluation during the financial years of April 2009 to March 2012.



Awards and Recognition



Dr. Sreeni Tripuraneni, Chairman and CEO of 4Gid is honored with the **“Outstanding Entrepreneur Award”** from the prestigious Asia Pacific Entrepreneurship Awards (APEA) 2014.

The award was presented to Dr. Sreeni by former Chief Election Commissioner (CEC) of India, Dr. GV Krishnamurthy and President Enterprise Asia, Mr. William NG, at an award function held at New Delhi, India.



4Gid, won the Frost and Sullivan Excellence Award.

4Gid is Recognized for Growth Excellence Leadership in India Automatic Identification and Data Capture Market.

Dr. Sreeni receiving the award.



4Gid ranked in the Top 40 India's Small Giant!

4Gid has won the India's Small Giant Award at an event held in New Delhi on Friday, 11th July 2014. The Chief Guest at the occasion Shri Kalraj Mishra, Hon'ble Union Cabinet Minister of MSME presented the award to Dr. Sreeni.



Awards & Recognition



4Gid ranked the **4th fastest-growing technology company consecutively for the years 2012 & 2013 by Inc. 500** the leading US magazine that focuses on entrepreneurship and growth.

The rankings are based on the Net Sales CAGR (Continuous Annual Growth Rate) from April 2008 to March 2012; with a CAGR of 379.14% 4Gid stands tall at the 4th position for the second time in the rankings of the Inc magazine.



4Gid is **ranked 4th fastest-growing company by Inc.**, the leading US magazine. 4Gid with a Net Sale CAGR of 395% during the period of evaluation.

Dr. Sreeni, receiving the award from Mr. Frank Hancock, Managing Director of the investment Banking Division at Barclays Capital India on 23rd March 2013.



Awards & Recognition



4G Identity Solutions is recognized as the top 100 IT companies in India by the channel world magazine.

Dr. Sreeni Tripuraneni receiving the **Channel World Premier 100 award** from Mr. Sudhir Kamath, President – Sales & Marketing, IDG India.



4Gid wins the ChannelWorld Premier 100 Award 2014 for the third time. ChannelWorld Premier 100 awards 2014 recognizes 4Gis as a Channel World Premier 100 Honoree for taking ingenious initiatives in a challenging and competitive business environment and championing new ideas by practicing new ways of looking at the business and industry.



Awards & Recognition



4Gid is honored with **Red Herring 2013 Top 100 Asia Award** for being among the top technology companies in Asia, deploying cutting edge biometric technologies and having an explosive growth.

Dr. Sreeni Tripuraneni, Chairman & CEO, 4G Identity Solutions receiving the award from Mr. Alex Vieux, Publisher and CEO of Red Herring, on 5th September 2013 at Hong Kong.



4Gid won the India SME Award for the second time in a row; The India SME 100 Awards 2014

4Gid ranked among the top 100 SMEs of India by BOI INDIA SME 100 AWARDS for the period 2012-2013, for exemplary and outstanding achievement.



THANK YOU!



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