# Indian National Identification System

**\*Ms. Divya Sain**
**\*\*Dr. Neelu Jhala**

**Abstract**

The National Identity Code (NIC) system is an important step for the integration of services in India which can enhance the quality, understanding and continuity of various services. High quality information should be stored to improve the quality and coordination of service provision through personal service records and to improve the effectiveness, efficiency, acceptability of these services through ongoing monitoring and evaluation.

**Keywords**: National Identity Code, National Identification System, India, Aadhaar, UIDAI, UID.

**Introduction**

The National Identity Code (NIC) will assist service suppliers in coordinating services and guarantee that personal information of the citizens of the country will not be misused. The NIC system will be helpful to integrate fragmented service systems in a systematic way, and continue to provide policymakers with the necessary strategic information. This will help the strategists of the country to take important decisions and implement them up to every citizen.

Technology is constantly growing, modernizing and revolutionizing the way people conduct their daily lives. From complicated to even the simplest of tasks, technology is being designed to make life simpler, faster and more efficient. The National Identification Card Programme (NICP) is such a system which making a national identity document that is an identity card with a photo, usable as an identity proof at least inside the country, it is issued by an official authority. The national ID is a valid proof of identity that is a means of simplifying public and private transactions, enrollment in schools, and opening of bank accounts, etc.

A national identification number, national identity number, or national insurance number is used by the governments of many countries as a means of tracking their citizens, permanent residents, and temporary residents for the purposes of work, taxation, government benefits, health care, and other government-related functions.

The ways in which such a system is implemented vary among countries, but in most cases citizens are issued an identification number upon reaching legal age, or when they are born. Non-citizens may be issued such numbers when they enter the country, or when granted a temporary or permanent residence permit. Many countries issued such numbers for a singular purpose, but over time, they become a de facto national identification number.

**The case of National ID in India: The ID is the number**

- Launched in 2009, Aadhaar is now the largest biometric identification scheme globally, with 1,289B people enrolled as of 29 March 2021.

- With Aadhaar, each resident over 18 in India is issued with their own unique **national identification number**, the 12-digit Aadhaar number.

- It's a single, universal **digital identity number** that any registered entity can use to "authenticate" an Indian resident.

- The unique number and biographic information are printed on a paper document known as the **Aadhaar card**.

- Anyone who has lived in India for 182 days can enroll in Aadhaar for proof of identity. So it's a residential card and **not a citizenship card,** *per se.*

- Most importantly, the ID is the number, not the card. And it's purely digital and hence verifiable online.

**Significance of `Aadhaar'**

- A 12-digit unique identity for every Indian individual, including children and infants

- Enables identification for every resident Indian

- Establishes uniqueness of every individual on the basis of demographic and biometric information

- It is a voluntary service that every resident can avail irrespective of present documentation

- Each individual will be given a single unique Aadhaar ID number

- Aadhaar will provide a universal identity infrastructure which can be used by any identity-based application (like ration card, passport, etc.)

- UIDAI will give Yes/No answers to any identity authentication queries

In general, a National Identity Number or Card allows the appropriate governmental authorities to appropriately monitor the movements and transactions of every registered citizen. Identification cards are essentially devices that would probably incorporate an individual driver's licenses, social security cards, birth certificates, and bank cards all into one. Owing to the important and private information that could possibly be retrieved from these cards, having some sort of biometric security and authentication protocols would probably be linked to the cards.

**Biometric-Technological concerns**

Biometric technology includes the verification of an individual's identity using unique personal characteristics. The different types of biometric identifiers may be placed in two separate groups. These two groups are physical and behavioural technologies. Some examples of biometrics using physical technology are retina or iris scans, face scans, and most commonly finger and/or hand prints. Examples of behavioural biometrics are voice recognition and handwritten signatures, and dynamic signatures or keystroke dynamics.

Cluster computing or high-performance computing frameworks is a form of computing in which bunch of computers (often called nodes) are connected through a LAN (Local Area Network) so that they behave like a single machine. The connected computers execute operations all together thus, creating the idea of a single system. Some of the popular implementations of cluster computing are Google search engine, earthquake simulation, petroleum reservoir simulation, and weather forecasting system.

Earlier computing features were good to solve simple problems, but they have no ability to sync up

the current day technologies and advancements. Pricing scenarios, low performance, reliability and some of the other reasons couldn't gain access to manage huge data and previous computing systems can't clear today's IT problems. In the scope of this, IT departments introduced an innovative approach in solving the limitations of a single system and that was "Cluster Computing". The advantages of this technology allowed many organizations to implement this technology in their activities.

Cluster computing refers that many of the computers connected on a network and they perform like a single entity. Each computer that is connected to the network is called a node. Cluster computing offers solutions to solve complicated problems by providing faster computational speed, and enhanced data integrity.
Cluster computing goes with the features of:

- All the connected computers are the same kind of machines.

- They are tightly connected through dedicated network connections.
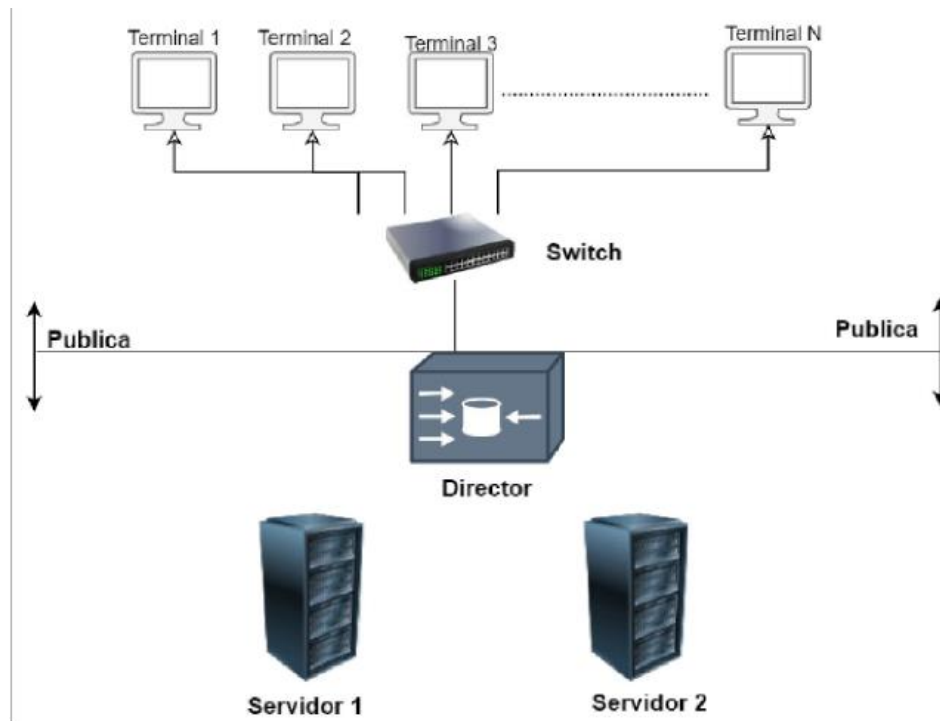
- All the computers share a common home directory.



**Fig. 1: Cluster computing operation**

Clusters' hardware configuration differs based on the selected networking technologies. Cluster is categorized as Open and Close clusters. In Open Clusters, all the nodes need IP's and those are accessed only through the internet or web. This type of clustering causes enhanced security concerns. And in Closed Clustering, the nodes are concealed behind the gateway node and they offer increased protection.

## Indian National Identification System

*Ms. Divya Sain & Dr. Neelu Jhala*

Clusters need to incorporate fast interconnection technologies in order to support high-bandwidth and low-latency inter-processor communication between cluster nodes. Slow interconnection technologies had always been a critical performance bottleneck for cluster computing. Today, improved network technologies help realize the construction of more efficient clusters.

**Conclusion**

National Identification System working and implementing for a National ID `Aadhaar' for every resident Indian. The technology used is robust and fit for the purpose of a unique ID for everyone. A national ID card scheme can lead to greater transparency. The National ID system is building the chain of trust. The issue of legal continuity is at the heart of the digital transformation of our exchanges and transactions. Whatever the media, digital exchanges should enjoy the same legal security as their physical equivalents.

Governments worldwide are seeking to boost efficiency, economic development, and inclusion with the ultimate aim of better serving their citizens in a reliable, secure, and transparent way.

**\*Research Scholar**
**\*\*Assistant Professor**
**Department of Com. Sc. & Application**
**Bhupal Nobles' University,**
**Udaipur (Rajasthan)**

**References**

1.  Anil, K.J.; Arun, A.R.; Nandakumar, K.: Introduction to Biometric; Springer: Berlin, Germany, 2011.

2.  Ghandeharizadeh S. and Sommers F., "Parallel Databases and Decision Support Systems", Handbook of Data Mining and Knowledge Discovery, W. Klosgen, and J. Zytkow (eds.), Oxford University Press, 2001.

3.  Luca Verderame, Ivan Merelli, Lucia Morganti, Elena Corni and Alessio Merlo: A secure cloud-edges computing architecture for metagenomics analysis, Future Generation Computer Systems, Volume 111, October 2020, 919-930.

4.  Pfister, Gregory (1998). In Search of Clusters (2nd ed.), Upper Saddle River, NJ: Prentice Hall PTR, p.36, ISBN 0-13-899709-8.

5.  Sahil Garg, Kuljeet Kaur, Shalini Batra, Georges Kaddoum and Azzedine Boukerche: A multi-stage anomaly detection scheme for augmenting the security in IoT-enabled applications, Future Generation Computer Systems, Volume 104, March 2020, 105-118.

6.  The World Bank Report "Integrating Unique Identification Numbers in Civil Registration", International Bank for Reconstitution and Development, 2018.