IrisAccelerator Identification System is designed for large-Scale biometric de-duplication and Identification solutions. IrisAccelerator is a system that provides a fast iris matching facility using Iris ID’s technology. IrisAccelerator is configurable to support large population databases of up to 1 billion with hundreds of millions of transactions per day. The IrisAccelerator system is a cluster of servers where each server runs multiple matching engines referred to as “IrisSaber”. The IrisAccelerator architecture is designed to be hardware independent. It can be deployed on a “Virtual Machine” to realize economies of scale.

**IrisAccelerator Key Product Features**

- Scalability
- High Availability: (No single point of failure)
- Partial Failure Support
- Component Recovery
- Consistency
- Speculative Execution
- Supports windows and Linux
- Economies of scale

**IrisAccelerator™ system modules**

- IrisAccelerator™ SDK: A software development Kit that provides the Application Program Interface to communicate with the system. This interface consists of enrollment and identification functions that can be resourced by custom applications to enroll and identify users in the IrisAccelerator™ system.

- IrisController™: The server component that manages the database of users and the IrisCodes. IrisController™ processes the IrisAccelerator™ SDK requests and is a one-point access to the IrisSABRE™.

- IrisSABRE™: The iris matching module that matches requests against the entire database. All enrollments and IrisCode deletions from the system are updated in the IrisSABRE.
Technical Specifications

- LoadBalancer: LoadBalancer module is an interface between the IrisAccelerator™ SDK and the cluster of Groups in the IrisAccelerator™ system. The LoadBanancer accepts SDK requests given to the system and forwards these requests to IrisController in a “round robin” style (a process that sends its output back to the input source). This module is also responsible for adding a new IrisAccelerator™ Server into the Group, and for removing non-functioning Servers from the Group. This module has a failover protection mechanism that ensures smooth functionality of the cluster.

- IrisAccelerator™ Configurator: An application that provides an interface for configuring (create, delete and modify) the groups and servers in the IrisAccelerator™ system. It displays the list of groups and servers and lets the user create, delete and modify groups and servers in the IrisAccelerator™ system.

- IrisAccelerator™ Device Manager: Commonly referred to as “DM”, the IrisAccess device Manager is an application that provides an interface for control and monitoring of the entire system. It displays the configuration of every server in the Group as well as the active and backup LoadBalancer for the IrisAccelerator™ system.

IrisAccelerator Products

IrisAccelerator HA

Operating System
- Red Hat Linux Enterprise Linux V6
- Memory* – Minimum 4 GB
- HDD 500 GB Minimum

Database
- Oracle 11G R2
- Oracle Express
- MS SQL 2008 or greater
- Search Gallery – Virtually unlimited

IrisAccelerator M

Operating System
- Windows Server 2008 or Higher (64 Bit)
- Memory* – Minimum 4 GB
- HDD 500 GB Minimum

Database
- Oracle 11G R2, Oracle Express
- MS SQL, MS SQL Express
- Search Gallery – up to 10M

*IrisPro HID Reader

IrisAccelerator HA

- LoadBalancer
- IrisController
- IrisAccelerator™ Configurator
- IrisAccelerator™ Device Manager

IrisAccelerator M

- LoadBalancer
- IrisController
- IrisAccelerator™ Configurator
- IrisAccelerator™ Device Manager