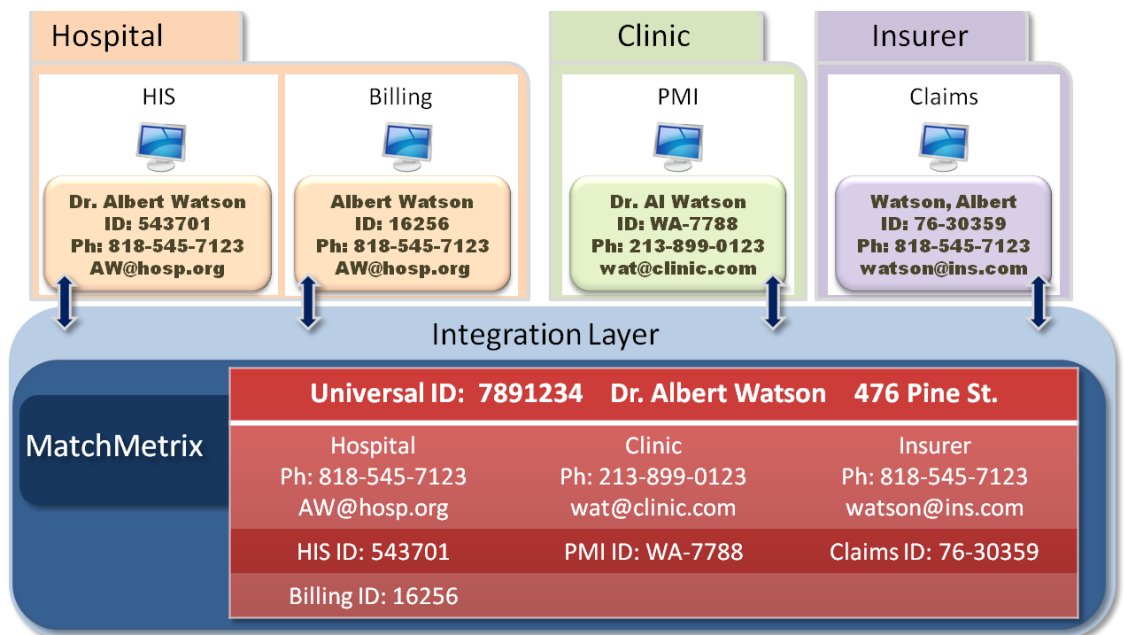


## MatchMetric Provider Index Suite

In the healthcare ecosystem, a provider can have many roles and definitions, such as a healthcare professional, a service center, an organization, or any entity which supports the delivery of care. Accurately identifying a provider's role is essential for the efficient operation of clinical and business transactions, especially in the ever expanding circle of care. However, since there is no uniformly deployed standard for provider details, the health system experiences delays, errors, and duplicate records for the same provider. Today, keeping track of the multiple local identifiers and various attributes of each provider is a frustrating manual activity, heavily reliant on fax, phone, and paper.

The MatchMetric™ Provider Index Suite simplifies the process of managing and sharing provider information. The Suite creates a uniform and comprehensive central repository of provider profiles, their demographic information, and the services they offer. The core of the solution is a master index that aggregates provider information from independent systems and cross references their multiple unique identification codes.



With a master provider index in place, healthcare organizations can look to and rely on a single location for all available institutional knowledge regarding a provider. As part of an integrated solution, the provider index can be queried to translate between provider IDs or scheduled to receive updates from the National Provider Index and other systems. The centralized and consistent nature of the provider index promotes quality communications, efficient operations and expedited financial transactions. What was once a burdensome process to identify, maintain, access, and exchange provider information is now automated, centralized, and enhanced.

### Enterprise Provider Index

A centralized, comprehensive and trusted directory to manage and share information about providers across healthcare settings and organizations

### Benefits

- Increase accuracy in the capture and exchange of provider data
- Easily locate service offerings and schedules
- Streamline billing, scheduling, claims, and other corporate processes
- Improve communication among members and stakeholders
- Enable faster participation in HIEs and other exchange initiatives

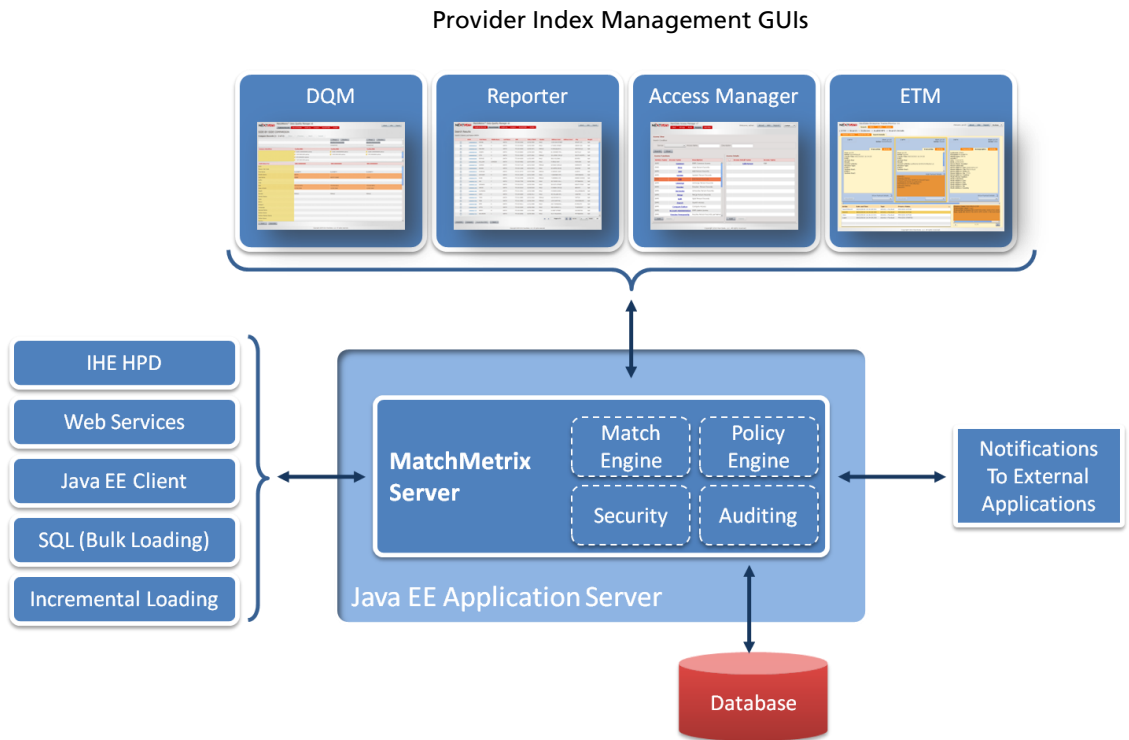


## Features

- **Optimized matching algorithm to compare and standardize provider population**
- **Data model for provider attributes:**
  - credential status
  - practicing rights
  - roles and restrictions
  - communication channels
- **Define multiple relationships:**
  - between providers
  - between providers and organizations
- **Location attributes can store multiple work settings for easy information distribution**
- **Integrates into existing environments through APIs**

## Technical Overview

Based on the MatchMatrix MDM Platform developed by NextGate, the Provider Index Suite delivers accuracy, ease of use, and product extensibility in a rapidly implementable solution. A finely tuned probabilistic algorithm, optimized for the specific needs of healthcare, utilizes a variety of data elements to match provider information from disparate systems and aggregates the content under a new enterprise identifier assigned for each provider. A complete set of APIs provide easy access to the index for data loading, real-time updates, querying, searching, and building plug-ins for an organization's specific needs. The Provider Index Suite includes detailed authorization, auditing, and monitoring capabilities to ensure proper access and record all activity.



MatchMatrix Provider Index High Level Architecture

## MatchMatrix Server

The MatchMatrix Server is the central component of the index, consisting of the database indexing logic and the sophisticated algorithms that evaluate, correlate, and resolve disparate data. The Server can be deployed in centralized and federated architectures, and delivers comprehensive functionality at an accelerated speed.

The data model for the index is tailored to healthcare provider information, including attributes necessary to support a multi-facility, multi-partner deployment. Probabilistic matching algorithms are tuned for aliases, transposed characters, and ethnic naming conventions. Based on user-configured match thresholds, all indexed entries are assigned a weight which is used to determine potential duplicates, automatic merges, and unique records.



## MatchMetric Data Quality Manager

The Data Quality Manager (DQM) provides the front-end web-based management interface for searching, viewing, editing, merging, and tracking records. It is the end-user gateway to the underlying MatchMetric index.

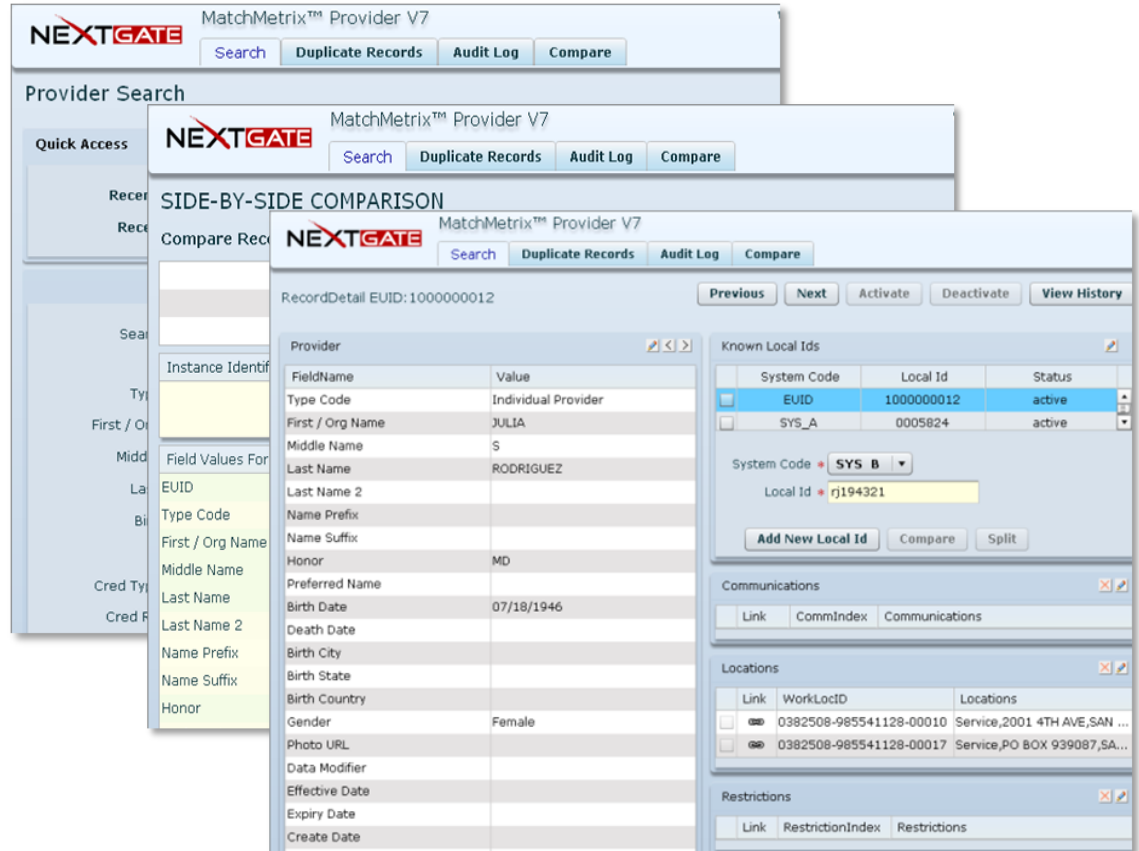
The search engine accepts a variety of query types and accommodates common user errors like misspellings and transposed characters. Up to 5 records can be compared side-by-side with highlights indicating field differences. Each system that participates in the index can choose to have individual fields masked for privacy. The DQM layout and functionality greatly enhance productivity and efficiency.

### Search Types

- Demographic with varying levels of attributes
- Provider contact information
- Local Identifier
- Statewide Identifier
- Providers at a specific location
- Services at a location
- Services offered by an organization
- Provider Schedule
- Hours of operation

### Stewardship Functions

- Search
- Review potential duplicates
- Compare records
- Merge records
- Un-merge records



Sample Data Quality Manager Screens

## MatchMetric Access Manager

The Access Manager supports the strict concerns of healthcare security, privacy, and data ownership by controlling user and system access to the index. Utilizing Role-Based Access Control, LDAP credential stores, consumer opt-in and opt-out settings, and PKI-based security, only authenticated users are capable of interacting with the contents, functions, and GUIs of the index. With granular precision, all data fields are restricted according to the roles of authorized users, protecting sensitive data from disclosure. Comprehensive audit capabilities track every time a record is viewed or changed, including before and after images, and the user ID. This feature is particularly helpful in the context of HIPAA and HIEs, giving participating enterprises confidence that their data is not generally available to any index user.



## MatchMatrix Reporter

The Reporter generates practical reports to help maintain a clear operational understanding of the index, from both a data quality and a user activity perspective. The Reporter GUI allows end users to generate standard reports or build ad-hoc reports against any data element in the index. Reports can be displayed on a browser or saved in PDF, XLS, or CSV formats for distribution. Most importantly, the reports can focus on a single facility or user, or span the entire index.

### Standard Reports

- Potential Duplicate by Facility
- Automatic Match by Facility
- Potential Overlay
- Transaction Activity

MatchMatrix™ Provider V7

Search Duplicate Records Audit Log Compare

Audit Log Search Result

Search Criteria: StartDate=06/01/2010 EndDate=07/02/2010

EUID1	EUID2	Function	Detail
1000001002	1000001000	Matching Review Search Result	View Potential Duplicate Search Resu
1000001004	1000001000	Matching Review Search Result	View Potential Duplicate Search Resu
1000001003	1000001000	Matching Review Search Result	View Potential Duplicate Search Resu
1000001004	1000001003	Matching Review Search Result	View Potential Duplicate Search Resu
1000001004	1000001002	Matching Review Search Result	View Potential Duplicate Search Resu
1000001003	1000001002	Matching Review Search Result	View Potential Duplicate Search Resu
1000001003	1000001002	Matching Review Search Result	View Potential Duplicate Search Resu
1000001003	1000001002	Matching Review Search Result	View Potential Duplicate Search Resu
1000001003	1000001000	Matching Review Search Result	View Potential Duplicate Search Resu

MatchMatrix™ Provider V7

Search Duplicate Records Audit Log Compare

Audit Log Record History - Details

History Records: (5 - 7 of 37) First <Previous Next> Last

Record Info	06/30/2010 13:09:46	06/30/2010 13:09:46
AUDITID	4	2
EUID1	1000001004	1000001003
EUID2	1000001002	1000001002
PrimaryObjectType	Provider	Provider
Function	Matching Review Search Result	Matching Review Search
Detail	View Potential Duplicate Search Result	View Potential Duplicate
CreateUser	admin	admin
CreateDate	06/30/2010 13:09:46	06/30/2010 13:09:46

Sample Reporter Screens

### Related Products

- MatchMatrix EMPI Suite
- MatchMatrix Terminology Index Suite
- Enterprise Tracker and Monitor

## Enterprise Tracker and Monitor

The Enterprise Tracker and Monitor (ETM) provides centralized monitoring and auditing for distributed applications built with the MatchMatrix Provider Index Suite, making it easier to get a clear, comprehensive picture of the state of the entire system. ETM monitors messages, errors, and alerts, storing them to enable report generation, audits, and message resubmission to aid in troubleshooting, all in a simple and intuitive web based GUI.

## NextGate Implementation Resources

NextGate has unmatched experience in designing, implementing, testing, and rolling out index solutions. Our experience starts in the early 1990's with the development of healthcare's first vendor independent EMPI. Since then, our team of experts has been working together, acquiring a distinguished track record and deep knowledge of the subtleties, benefits, and consequences inherent in the implementation of an index. This elite team is comprised of solution and product architects, engineers, QA analysts, and project managers, each with an extensive knowledge of the entire index implementation process.

## About NextGate

NextGate, the Enterprise Master Index leader, offers products and services for the precise management and access of information. With an extensive background in Enterprise Master Person Index, Enterprise Application Integration, and Service Oriented Architecture technology, NextGate is a leader in delivering creative, robust and simple solutions that make data management easier.