Attain Insight

Enhancing IBM Global Name Management for Better Name-Matching Results

Strengthen Accuracy and Performance in High-Volume Environments

Introduction

When accurate name matching determines who gets identified, approved, or investigated, the stakes are high. Whether you're onboarding a new customer, assessing risk or sorting out large datasets, getting matches right – quickly and at scale – has never been more important.

Global population migration and diasporas are increasing the challenge. Organizations now encounter more languages, scripts, and naming conventions than ever. Matching names accurately across this diversity requires tools that understand how names behave, not just how they're spelled.

For decades, IBM InfoSphere Global Name Management (GNM) has been that tool. Built on extensive linguistic and cultural research, GNM understands how names shift across regions, how cultural attributes influence meaning, and when different variations point to the same person. Few systems match its depth of knowledge.

Enhancing IBM GNM for Modern Demands

Even with GNM's strengths, today's environments create new pressures. Massive datasets, complex transliterations and fast-moving workloads push traditional processes to their limits. Name matching blends linguistic rules with operational judgment, so false positives, missed matches and slow processing can still happen.

Across industries, organizations tend to face the same hurdles:

- Complex transliterations and scripts that create uncertainty in how names should be interpreted
- Performance limits with large datasets, especially when parsing and search run in a single thread
- Operational constraints around load distribution, failover and update management
- Heightened risk at onboarding, when the least information is known about an individual and confidence in results matters most
- The "opinion" nature of name matching, where stronger verification signals reinforce decisions

To tackle these issues head-on, Attain Insight developed five add-ons to boost GNM's accuracy, speed, and reliability. These enhancements strengthen what GNM already does well and help teams keep pace with the rising demands of identity verification in a global, fast-moving world.

Solution Brief

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Attain Insight Intrinsic Add-ons for IBM Global Name Management

Post-search Biometric Filtering for IBM GNM

The Challenge
Even strong name-matching logic sometimes leaves organizations wanting additional assurance.

How it Works
Post-search Biometric Filtering uses biometric data from an individual's photo ID (or other facial image) to produce a second, independent confidence score that confirms the name-matching result or flags inconsistencies. By combining two signals – GNM's linguistic analysis and biometric evidence – this multi-modal verification allows organizations to gain a clearer, more reliable view without altering existing workflows.

The Result
Fewer false matches, fewer missed connections and stronger confidence in every match.

Transliteration Pre-processor for IBM GNM

The Challenge
Non-Latin scripts don't always map cleanly to Roman characters, and basic transliteration often produces "gibberish" or misleading variants. This creates mismatches even when the underlying name is the same.

How it Works
The Transliteration Pre-processor resolves transliteration and translation quirks before names reach GNM. It produces clearer, more interpretable representations – especially for Thai, Burmese and Cyrillic-based variants – giving GNM a more accurate starting point for determining whether names are related.

The Result
Better accuracy across diverse languages and fewer uncertain or ambiguous cases.

High-Performance Name Parser for IBM GNM

The Challenge
Parsing names into meaningful components, such as recognizing "Jean-Claude" or "Abdul Karim" as single units, is essential for accurate matching but computationally demanding at scale.

How it Works
The High-Performance Name Parser enables multi-threaded parsing, which distributes work across multiple CPU cores to dramatically reduce processing time. GNM's linguistically-informed rules remain intact, but the time it takes to apply them drops significantly.

The Result
Faster preprocessing of large datasets, improved throughput in high-volume environments, and more efficient use of existing infrastructure.

Load Balancer for IBM GNM

The Challenge
High-volume deployments often require multiple servers, resilience during hardware failures, and seamless updates.

How it Works
The Load Balancer distributes traffic across servers, manages how updates are propagated, and prevents interruptions if one instance goes down. It also manages controlled restoration, so updates aren't lost when servers rejoin.

The Result
Greater resilience, smoother operations, and reliable performance at scale.

Search Accelerator for IBM GNM

The Challenge
Single-threaded search limits performance in environments that require speed, real-time lookups, or massive parallel investigations.

How it Works
The Search Accelerator enables multi-threaded searching, processing queries in parallel across multiple CPU cores. Organizations can fully leverage modern hardware, dramatically increasing both search speed and throughput.

The Result
Faster response times, higher search capacity and stronger overall system performance.

Accelerate and Strengthen Your Name-Matching Strategy

The Attain Insight Intrinsic add-ons extend the power of IBM Global Name Management, giving organizations the accuracy, speed and confidence they need to match names in an increasingly global world. Whether the goal is reducing ambiguity, improving verification or handling greater scale, these enhancements make GNM even more effective for identity verification and fraud prevention.

To see how these enhancements can strengthen your workflows, contact Attain Insight at:
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