

VertisCoder

AI-Powered Code Conversion

SAGE provide AI-powered automated conversion engine (*VertisCoder*) for legacy ETL and database to modern architecture with intelligent pattern recognition and context-aware code generation.



Revolutionary Data Transformation

Our **VertisCoder** represents the next generation of automated data migration technology, leveraging advanced machine learning and natural language processing to transform legacy ETL systems into modern, cloud-native architectures. This intelligent platform eliminates the complexity, time, and risk associated with traditional manual ETL conversions.



Core Technology Foundation

Built on cutting-edge AI algorithms including AI models, neural networks, and advanced parsing engines, our solution provides 80% automation for ETL migrations while maintaining over 90% program integrity. The engine supports comprehensive conversion from legacy platforms including IBM DataStage, Informatica PowerCenter, SSIS, and Talend to modern frameworks like Python, PySpark, and cloud-native solutions.



Target Market & Use Cases

Designed for enterprises managing large-scale data ecosystems, the solution addresses critical business needs including legacy system modernization, cloud migration initiatives, regulatory compliance requirements, and digital transformation programs. Organizations across financial services, healthcare, retail, and manufacturing sectors have successfully deployed our technology to accelerate their data modernization journeys.



Why VertisCoder?

Huge Migration Effort

Traditional coding workflows are time-consuming, requiring manual effort to update. This slows down release velocity, especially when teams juggle multiple projects or tight deadlines.

Resource and Skill Constraints

Teams often face bandwidth issues or lack expertise in specific languages, frameworks, or APIs—delaying innovation.

Inconsistent Code Quality

Human error and differing coding standards lead to bugs, redundant code, and maintenance challenges. This inconsistency impacts scalability, performance, and long-term technical debt management.

Save 80%
of Effort

Accelerate
and Smart

Reduce
Risk

Key Features

The platform is leveraging modernized AI models with analyze, extraction of metadata, understanding the lineage and dependencies with code-to-code translation with dedicated schema, function and plugins mapping which helps our clients:



Intelligent Code Analysis & Understanding



Automation Conversion Features



Pre-trained and Fine-tuned Model



Comprehensive Quality Assurance & Validation



User Experience with execution Layer and Integration



Continuous Monitoring

Conversion Approach

AI Processing

- Model Selection
- Prompt Engineering
- Code Explanation

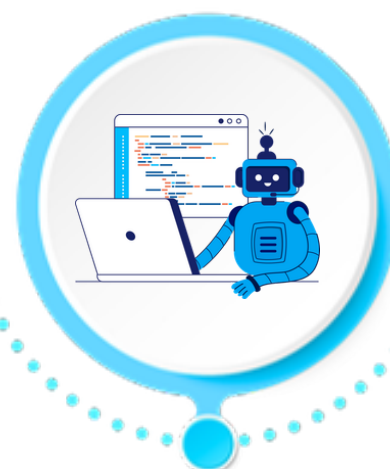
Review & Refine

- Code Review and Fine Tune
- Performance Optimization
- Fine Tune with Feedback



Input Preparation

- ETL objects extraction
- Dependency Analysis
- Context Documentation



Code Generation

- AI code generation engine
- Mapping and framework specific conversion
- Configuration and schema implementation



Key Solution Components

Core AI Engine Components

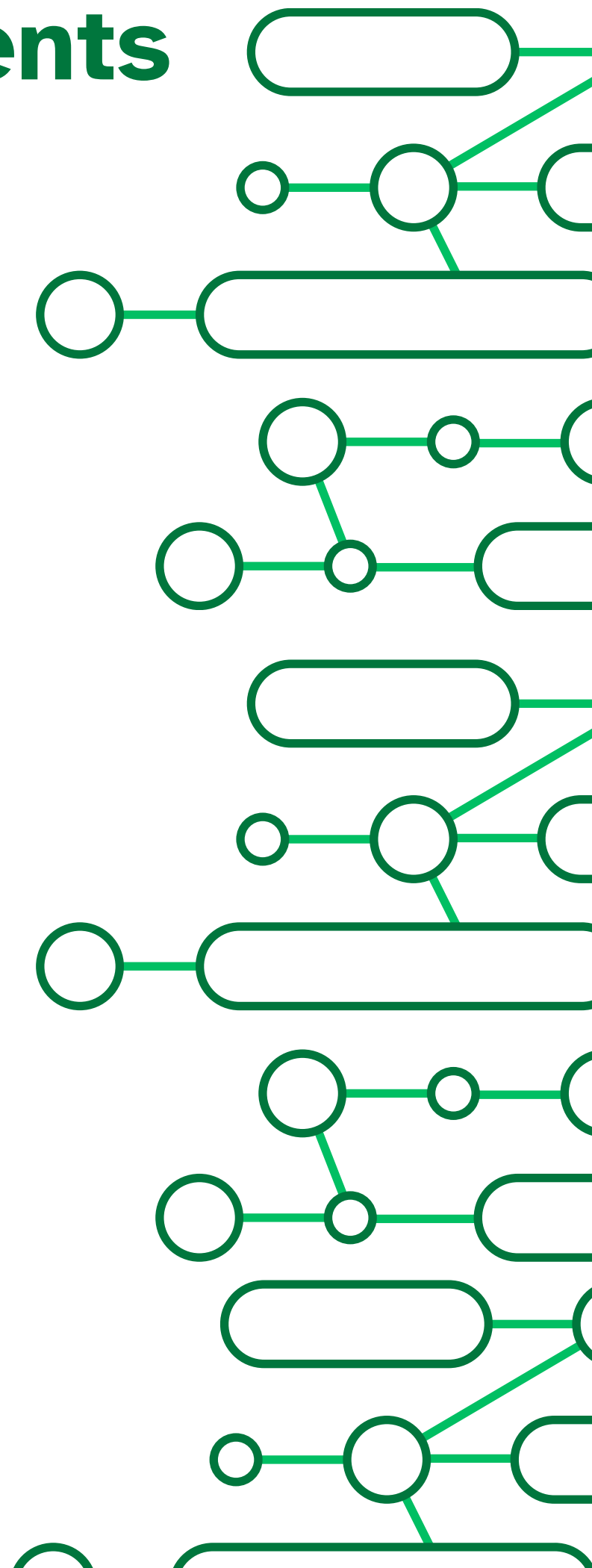
- ✓ AI-based code translator
- ✓ Semantic Analysis Engine
- ✓ Sequential Workflow Recognition System
- ✓ Validation & Testing Framework

Processing Layer

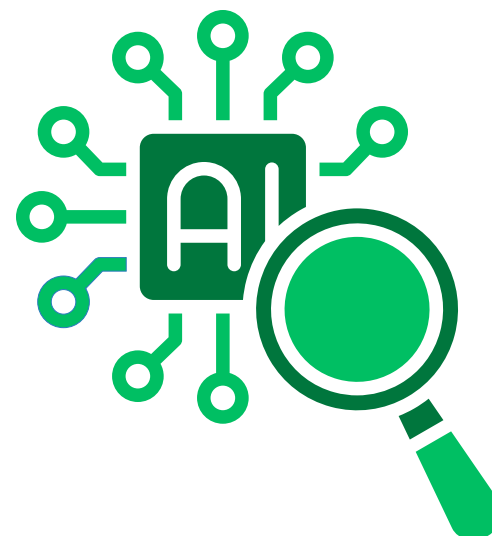
- ✓ Metadata Repository
- ✓ Parsing & Tokenization
- ✓ Code Generation Engine
- ✓ Performance Optimizer

Integration and Orchestration

- ✓ Source System Connectors
- ✓ Support integration with Cloud Platform ETL Tools
- ✓ Lineage Tracking
- ✓ Monitoring & Alerting



8 Key Capabilities with VERTISCODER



Superior Code Translation

1

With multi-source platform support, intelligence with business logic preservation and Automated schema evolution



AI-Powered Analytics and Optimization

2

Pattern Recognition with identify and optimization, and performance benchmarking



Enterprise-Scale Processing

3

Parallel conversion with cross platform capabilities



Quality Assurance & Validation

4

Automated test generation, data validation and regression testing



Monitoring & Management

5

Real-time Conversion tracking with intelligent error recovery. With providing comprehensive reporting



Integration Framework

6

Support with version control management and CI/CD deployments, with support both on-premises and cloud deployments





WHAT WE OFFER

AI-powered *VertisCoder*



COMPREHENSIVE EVALUATION

SAGE provides detailed inventory catalog and the catalog includes complexity evaluation for conversion.



SCOPE REDUCTION & RECOMMENDATIONS

AI driven dependency and code analysis to reduce the scope of assessment of the conversion, provides a high level normalization and cost optimization solution.



MIGRATED DATA RECONCILIATION

Data Reconciliation with A-B Testing on data level with automated AI process, AI-generated test case, and automated testing approach to reduce testing effort.



MIGRATION EFFORTS ESTIMATION

Provides conversion scope, detail migration approach, efforts for each of inventory items, third party integration and total conversion cost.



MIGRATION STRATEGY DESIGN

Includes recommendation for conversion approaches (technology mapping, re-architecting), patterns mapping, cut-over implementation approach, tech-stack selection and data verification and validation.



AI-MODEL POWERED CONVERSION

Automated ETL conversion with export metadata to new ETL Tools platform with integration to different industries plugins with reducing manual effort on the code conversion