

INDUSTRIAL-GRADE LANGUAGE TOOLING FOR COBOL

Turn your COBOL estate into structured data you can trust

Our COBOL Language Engine — also known as our COBOL parser — turns COBOL 85 source into a clean, typed syntax tree you can query, analyse and transform.

459

NIST COBOL-85
PROGRAMS IN THE
REGRESSION CORPUS

681

AUTOMATED TESTS ON
EVERY PUSH

565

COBOL RESERVED WORDS
MODELLED

2019

IN DEVELOPMENT SINCE

— WHY A LANGUAGE ENGINE, NOT A PARSER

Impact analysis, rule extraction and migration all need a faithful, machine-readable model of your code — and a parser that fails on the awkward 5% of sources is worse than none. This engine never throws: bad input returns a partial AST plus positioned issues, so a batch run over 20,000 programs completes and reports where it struggled.

— WHAT YOU GET

■ NIST-validated coverage

The full CCVS85 suite — 459 programs, 345,000+ lines — plus 12 open-source corpora, in every regression run.

■ Copybooks resolved for you

COPY expanded recursively via a pluggable resolver. Ship your own to read from a repository or database.

■ Positions you can trust

Nodes and issues are positioned in the original file, not the preprocessed stream — what makes reporting usable.

■ Real-world source formats

Fixed format and HP Tandem, auto-detected. Area A/B rules, continuation lines, DECIMAL-POINT IS COMMA.

■ Embedded SQL and CICS

EXEC SQL and EXEC CICS are first-class AST nodes, with the raw SQL preserved verbatim.

■ Runs where you work

Anywhere with a JVM 8+ — no mainframe or IBM i connection. Analyse exported sources offline or in CI.

— WHY STRUMENTA

■ Guaranteed, not "best effort"

A one-year guarantee, extendable at your convenience, or pay-as-you-go.

■ Open foundation, no lock-in

Built on Kolasu, part of our Apache-2.0 StarLasu family. Open, documented AST — no proprietary IR.

■ The quote is the price

Once scope is agreed, the quote we provide is the final cost.

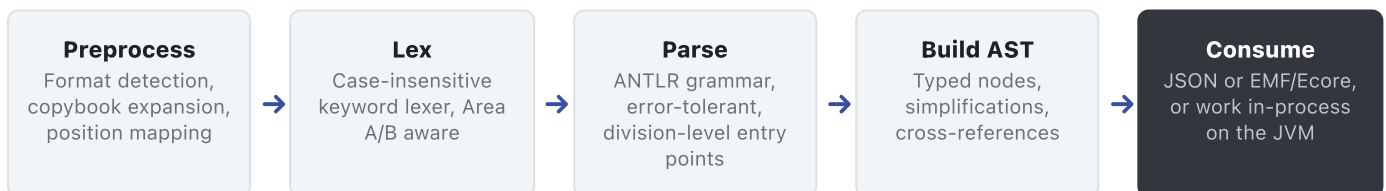
■ Language engineering is all we do

Founded 2017 in Turin, clients worldwide. Modernization vendors use our parsers in their own products.

LANGUAGE COVERAGE

Dialects	COBOL 85 at the core — the standard IBM ILE COBOL and mainframe COBOL dialects build on — plus selected extensions (ACU COBOL; partial Micro Focus RM COBOL / Visual COBOL). Analyzing an IBM i (AS/400) or mainframe codebase? Ask us about dialect coverage for your code.
Source formats	Fixed format (6-column sequence area) and HP Tandem, auto-detected; Area A / B enforced in the lexer.
Statements	Full COBOL-85 set, ~48 statement types: EVALUATE, PERFORM, SEARCH, SORT/MERGE, Report Writer, Screen and Communication sections, nested programs.
Preprocessor	COPY (with SUPPRESS) expanded recursively via a pluggable resolver; REPLACE; EJECT/SKIP/CBL.
Embedded languages	EXEC SQL / EXEC SQLIMS verbatim as AST nodes (IMS flagged); INCLUDE resolved; EXEC CICS parsed.
AST model	139 node types from a 2,558-line ANTLR grammar (~319 rules); 565 reserved words; typed cross-references.
Error tolerance	Never throws: partial AST plus positioned issues; divisions parse independently.
Delivery	JVM library (Kotlin/Java, JDK 8+) or CLI; fat jar, Maven artifacts; JSON and EMF/Ecore. Runs offline on any JVM 8+ — no mainframe or IBM i connection.

HOW IT WORKS



ONE ECOSYSTEM, ONE DATA MODEL

Our engines share the open-source StarLasu AST framework: COBOL, RPG, DDS and CL analysed with one data model, around 15 off-the-shelf parsers in all. Its LionWeb-compatible model opens the AST to Python, C# and TypeScript.

RPG & DDS Language Engine

RPG IV fixed and free form, SQLRPGLE and DDS; battle-tested on 30+ million lines of production RPG code.

CL Language Engine

2,160 IBM i CL commands mapped to typed AST nodes; LionWeb-native.

"Cannot recommend you enough"

Graham Cunningham, MEA General Manager, Heirloom Computing

TALK TO US

Try it in the Strumenta Playground before you buy. Standard, Distribution and Service licenses — all with documentation, dedicated support and a one-year extendable guarantee.

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