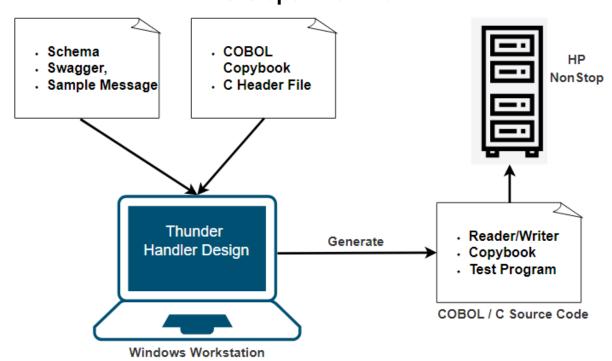




# **JSON Thunder Product Overview**

## **Using the Thunder Toolset**

### **Developer Workflow**



JSON Thunder enables COBOL programs to read and write JSON documents so they can:

- Exchange data in JSON format with other applications and companies.
- Use JSON messages to call web services or interface with third-party packages and non-COBOL applications.
- Create JSON APIs for COBOL programs enabling them to provide web services or be called by non-COBOL applications.

### **Read and Write JSON Messages in COBOL**

JSON Thunder generates all the COBOL source code needed to:

- Read JSON messages into COBOL structures.
- Create JSON messages from COBOL structures.
- Validate JSON messages to ensure only well-formed and valid documents are processed.

The code is generated as a COBOL sub-program that can be called from existing COBOL programs. A sample calling program is provided to assist with developing new programs.

## **How it Works**

# SELECT

your program field source<sup>1</sup> and JSON layout source<sup>2</sup>



## MAP

specific program fields to specific JSON nodes



## **GENERATE**

COBOL code to create or parse JSON<sup>3</sup>

#### **Model-Driven Development**

JSON Thunder uses a model-driven development approach enabling a faster time to market and the ability to respond to changes quickly. The Thunder toolset provides:

- A Visual Designer showing the program field layout, the JSON message layout and the mapping between the two.
- A full life cycle solution that is used in both development and maintenance.
- Automated source code generation.

#### **Features**

- High performance (not a generic parser!).
- Addresses the complexities of JSON (e.g. anyOf, oneOf, allOf, etc.).
- Model-driven approach reducing development time and enabling developers to respond to changes quickly.
- Create Handler Designs from JSON schemas, Swagger definitions, sample JSON messages and COBOL/C data structures.
- Architecture and platform independent solution.
- Easy integration with existing programs

#### **About TIC Software**



TIC Software is a leading technology product development and consulting services company. TIC draws from a rich NonStop heritage, while focusing simultaneously on future proofing solutions for our customers.

Committed to always putting the customer first, TIC acts as a trusted advisor in providing best of class products - secured through privileged partnerships and/or developed in house - as well as curated support, training, and strategic planning.

TIC continues to believe that community and education are the building blocks of the NonStop community and distinguishes itself by incorporating these tenets into each and every business approach.

<sup>&</sup>lt;sup>1</sup>Program field source can be COBOL copybook or derived from the JSON layout.

<sup>&</sup>lt;sup>2</sup>JSON source can be JSON Schema, sample JSON message or derived from program data fields.

<sup>&</sup>lt;sup>3</sup>The final output is a customized, callable program that can be used in existing applications. If you don't have an existing application, Thunder also provides a sample main (or calling) program that can serve as the starting point to developing it.