



INTER-OPERABILITY MADE EASY



MapuSoft is the global leader in software interoperability & reusability solutions that provide freedom, protection and stability to embedded applications





AGENDA

- Introduction
- Ada Changer Overview
- Ada Changer Architecture
- Partial list of Customers
- Sample Ada Conversion
- Question & Answers

- Slides 6 – 12 provided for information only



Ada-C/C++ CHANGER*

Tool Tuning

- ✓ Clean Compile
- ✓ Architecture Redesign/Refactor

(Optional)

Log Files

C/C++ Code

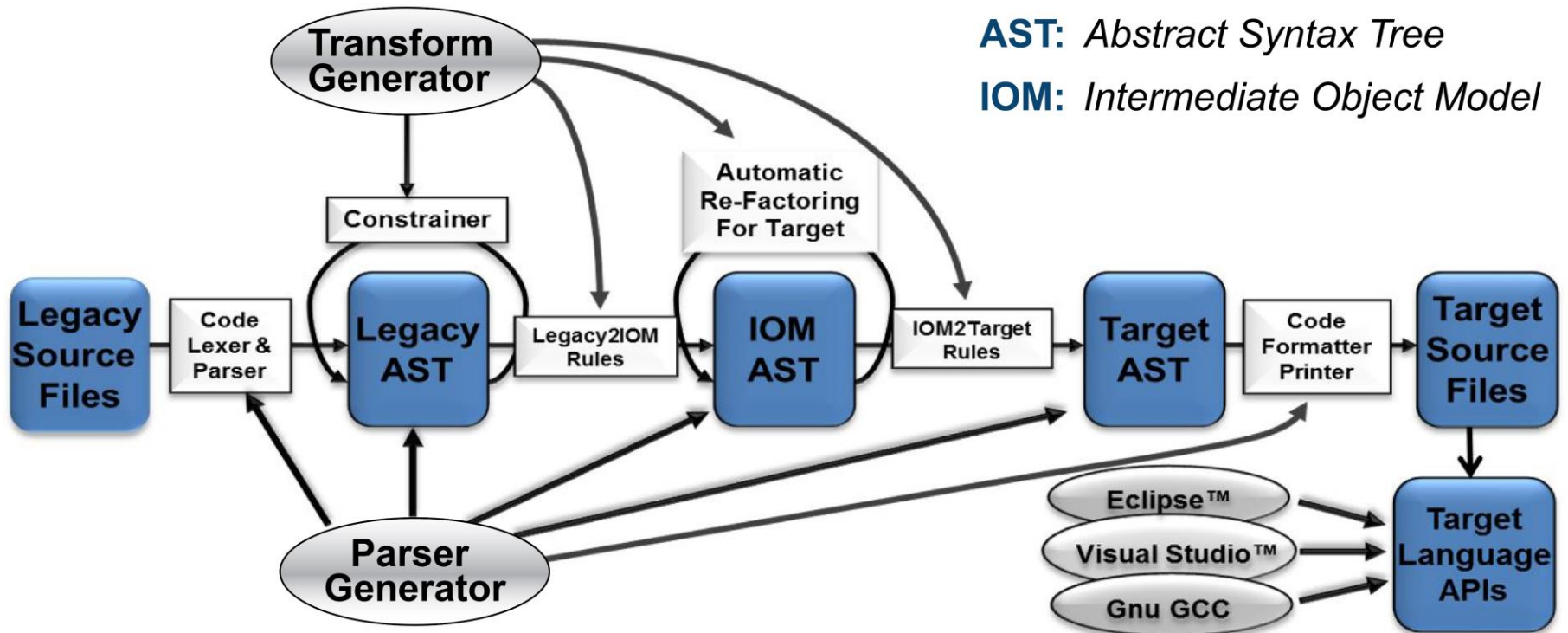
(Developer Ready
or Compilable)

Ada Code

Ada-C/C++
Changer

Design Docs
Legacy & New
(Blueprints)

Model-Based Rule-Driven Conversion Framework



A Sampling of Past Ada Projects



Over 150+ Automated Modernization Projects since 2000 - 100% Customer Satisfaction

System	Source(s)	Target(s)	SLOC	TTC
TOPSKY – Air Traffic Management – French Version	Ada	Java & C++	495k	12 Months
TOPSKY – Air Traffic Management – Nordic Version	Ada	Java & C++	541k	9 Months
TOPSKY – Air Traffic Management – Australian Version	Ada	Java & C++	638k	9 Months
Variable Message Format Test Tool	Ada	C++	77k	3 Months
Naval Undersea Warfare Center Weapons Control System (WCS)	Ada	C++	800k	7 Months
SAC Strategic Planning System	Ada	C++	40k	2 Months
E-2C Hawkeye Aircraft Mission Fault Isolation Program (MFIP)	Ada	C++	20k	5 Months
Navy Multi-band Terminal (NMT)	Ada	C++	89k	5 Months
Canadian Armed Forces Crypto Material Management System (CMMS)	Ada	C#	20k	4 Months
COBRA DANE Radar Calibration System (SCRS) of Ballistic Missile Early Warning System (BMEWS)	Ada	Java & C++	380k	8 Months
P-3C Orion Aircraft Acoustic Signal Processor System (ASP)	Ada	C++	500k	14 Months
Global Positioning Navigation and Timing Systems (GPNTS)	Ada	C++	221k	8 Months
Aegis ACB-08 Product Line Architecture (Analysis Only)	Ada	C++	1M	1 Month
Advanced Field Artillery Tactical Data System (AFATDS)	Ada	Java	5.5M	9 Months
Hundreds of Other Successful Projects Completed	32+ Source Languages	11+ Targets	1+ Billion	< 12 months

Why use Ada-C/C++ Changer Instead of Manually Rewriting?

- Conversion with Ada-C/C++ Changer is completed much faster than manual conversion, meaning the product can be deployed without many years of delay
- Ada-C/C++ Changer can handle large applications with multi-millions of LOC
- Our technical support team has expertise in Ada, C/C++, target tools and OS platforms
- Eliminate the need for a costly and tedious code re-write for extensive cost and time savings



Ada to C++ Conversion - Features

- Supports conversion of Ada 83 and Ada 95 to ANSI C++ 03
- Preserves Ada comments, files structures and variable names
- Converts Ada generics to C++ templates (most cases)
- Supports Ada tasking and rendezvous constructs
- Supports Calendar, System, Unchecked_Conversion, Record Representation Clauses, Variant Records, Declare Block Statements, Ada Tick Functions, Renames (for packages, variables, records, and types), “use” for packages and types, Ada Strings, access (including access all & procedure)



Add-on tool features and re-factoring services

- Generate design documents of existing & new code
- Transform Database and User-Interface implementation
- Remove dead or redundant code/data
- Merge and consolidate duplicate code/data
- Reorganize and improve design in new code/data
- Remove flaws in new code that originally existed in old
- Create reusable optimization/packaging/redistribution modules
- Integrate with modern parallel/multi processing and distributed/N-Tier operational environments



Add-on tool features and re-factoring services ...

- Modernization of legacy systems to multi-tier architectures
- Modernization of flat file, hierarchical and legacy databases
- Modernization of legacy UI to web or other modern UI
- Re-factor to improve maintainability, security and performance
- Custom pattern-based changes
- Migration to modern cloud architectures
- Testing & integration support solutions
- Extraction of business rules from legacy systems



Secured Facilities and Personnel

- Secure Room and Server Facilities
 - Cleared facility and servers for use on classified/secret code
 - Sensitive Compartmented Information Facility (SCIF)
- Cleared Staff
 - Staff maintains active security clearances which are reviewed periodically
 - Over 20 years of modernization experience with highly sensitive code
 - Completed large projects for US and Foreign Governments
- Procedural FSO
 - Employ an FSO with secure code handling procedure