



### INTER-OPERABILITY MADE EASY



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





FREEDOM

Don't confine your code to one platform



PROTECTION

Protect software investment



STABILITY

Robust and optimized platform







RTOS Simulator™ for Developers



Ada-C/C++ Changer™ Ada-Java Changer™ Ada-C# Changer™



Programming-Language Changer



DesignDoc Tools





### Easily migrate your code to a new OS

C/C++ Applications

#### **Current OS Platform**

VxWorks FreeRTOS

Nucleus μC/OS

pSOS µITRON

RTLinux ThreadX

VRTX QNX

Windows Linux/POSIX

#### **New OS Platform**

Linux NetBSD RT Linux Android Nucleus VxWorks

eCOS Freescale MQX ThreadX

LynxOS Windows FreeRTOS

Solaris μC/OS III Unix

μITRON QNX In-house





### **OS Changer Porting Kit Contents**

- Application Common Operating Environment (AppCOE): An eclipse based IDE for development of C/C++ applications
- One OS Changer Interface for the OS you are moving from
- Specific OS Abstractor Target Specific Module for the target OS you are porting to
- Library Package Generator
  - Full library source code of the OS Changer Interface and OS Abstractor Target Specific Module for your target platform
  - Sample demo applications
  - Project build files for supported tools & IDEs for your target environment





# **OS Changer Porting Kit Contents**

- Optimized Target Code Generator
  - Generates the OS Changer Porting Interface and OS Abstractor Target Specific Module source code,
     specifically optimized for your application and target environment
  - Creates project files for your target IDE
  - Includes the system settings you chose in the GUI-based Wizard
- OS Simulator for your chosen OS Changer Interface for host development/simulation
- Profiler to view performance data of your application and OS Changer Interface for your target





## ROI: Cost of Porting – Manual vs. OS Changer

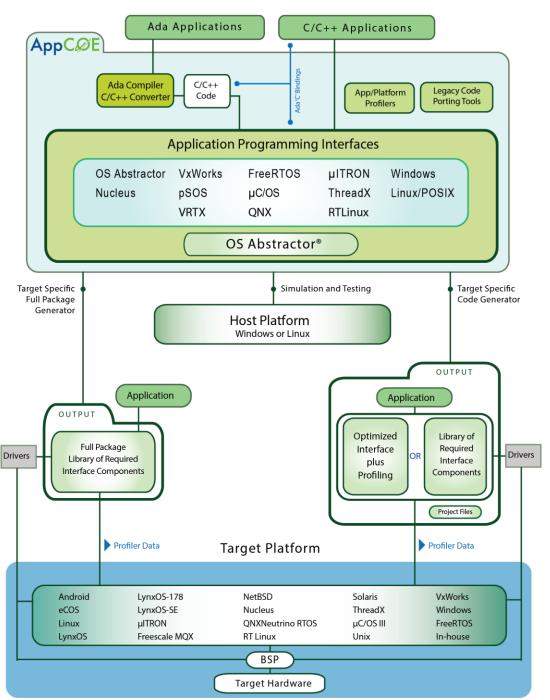
	Small	Medium	Large
	<u> 10K LOC</u>	<u>100K LOC</u>	1M LOC
Manual Porting of Single Application *	\$ 95,338	\$ 953,380	\$ 9,533,800
OS Changer License Fees	\$ 12,000 <sup>1</sup>	\$ 43,200 <sup>2</sup>	\$ 72,000 <sup>3</sup>
Estimated Labor to use OS Changer	\$ 8,000	<u>\$ 16,000</u>	\$ 64,000
Cost of Porting with OS Changer	\$ 20,000	\$ 59,200	\$ 136,000

<sup>(</sup> $^1$  = Single Seat License,  $^2$  = 10 seat License,  $^3$  = Source Code Site License)

Savings (Manual minus OS Changer) \$ 75,338 \$ 918,780 \$ 9,397,800

Return on Investment 377 % 2,436 % 6,910 %

<sup>\*</sup> Source: Software Engineering Institute, Carnagie Mellon, 2008 Bureau of Labor Statistics, 2006. Porting estimated at half the cost of new development.



Application Common
Operating Environment