OS CHANGER®

TECHNICAL DATASHEET

pSOS PORTING KIT

OS Changer pSOS® Porting Kit is a C/C++ source-level virtualization technology that allows you to easily re-use your software developed for pSOS APIs on another OS, while providing real-time performance. It eliminates the manual porting effort, saves money and shortens the time to market. OS Changer can also be used to simulate the pSOS Interface on a host machine. OS Changer Interface connects to your existing application that was developed on pSOS while the OS Abstractor Target Specific Module (specific to your target OS) provides the connection to the OS you are moving to.

OPTIMIZED CODE GENERATION: OPTION ONE

- Legacy porting tool to easily import your pSOS applications into AppCOE
- Perform your porting work on an Eclipse-based Windows or Linux host machine with the provided GNU tools for x86
- Generate optimized pSOS Interface code for your target, specific to your application
- Generate project files for your target IDE/tools environment
- Enable target profiling of the pSOS Interface and of the application functions to collect valuable performance data and generate comparative performance reports
- Selectively optimize each pSOS Interface function for performance based on its usage in your application
- Automatically generate initialization and configuration code based on the settings you chose in the GUI-based wizard

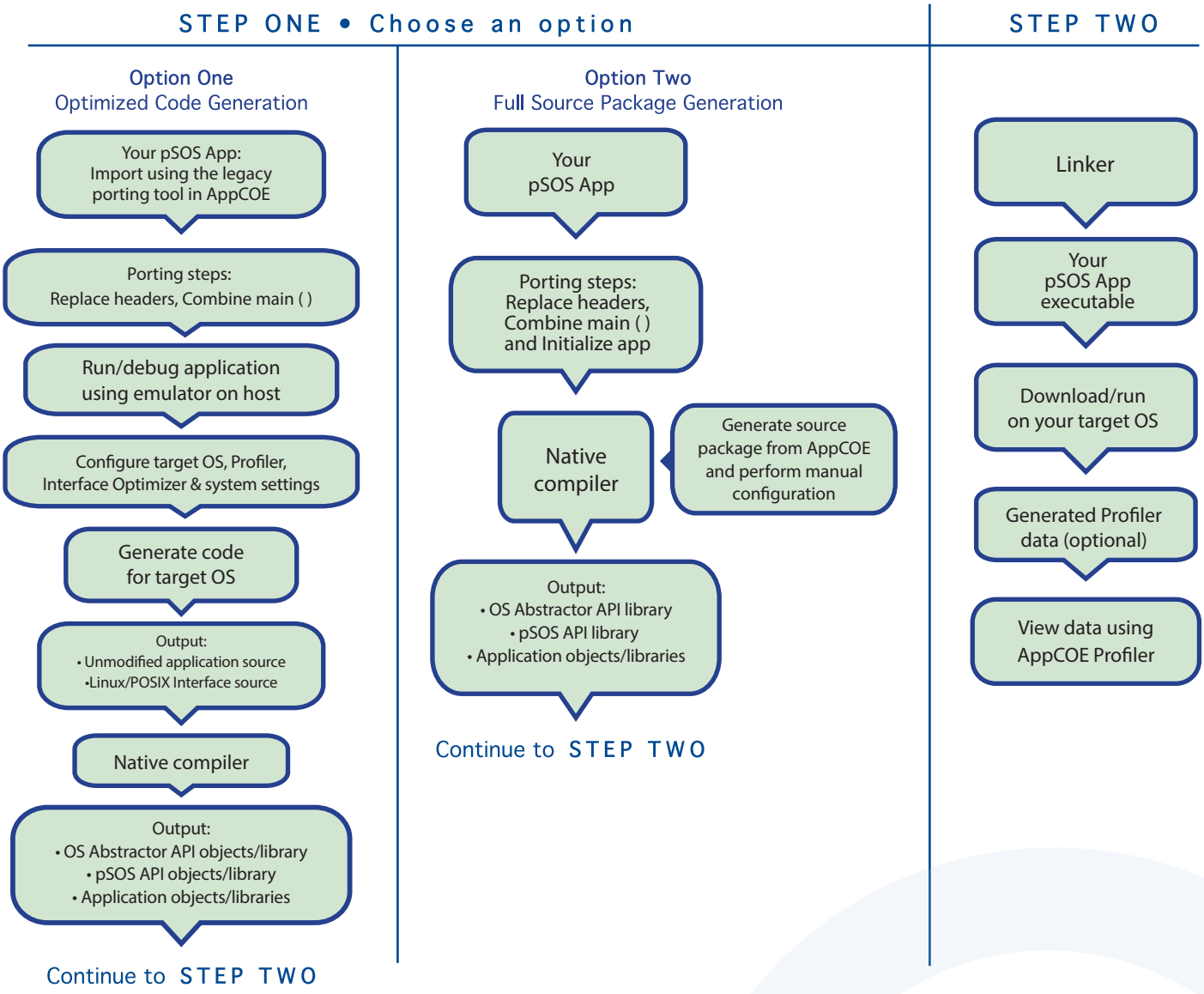
FULL SOURCE PACKAGE GENERATION: OPTION TWO

- Use with your preferred IDE/tools instead of the AppCOE development environment
- Provides a Porting Kit in a source code format which contains all the pSOS Interface functions for a specific target OS
- Requires manual configuration and initialization instead of using the AppCOE GUI-based wizard the AppCOE GUI-based wizard

OSCHANGER®

pSOS PORTING KIT

TECHNICAL DATASHEET



Technical Highlights

Includes a Process Feature

> Port your application to a single or multiple processes utilizing the user shared region provided for your global variables

> Create a new process by compiling the application separately or by launching it from your main application

> Provides software-based process features, even if the underlying target OS does not offer support

> Applications can pre-allocate heap memory during process creation

* Set maximum limits regarding the amount of heap memory each application can use to prevent applications from using up all of the system memory and impacting other applications

API Flexibility

> OS Abstractor APIs also available for use in your pSOS application

> OS Changer pSOS Interface can be used within a single or across multiple applications

Thread Pooling

> Applications can pool threads to increase platform robustness and performance by eliminating the overhead associated with actual task creation and task deletion at run-time

Mission Critical Features

> Applications have the ability to asynchronously recover from fatal software errors through a soft reset by rolling the stack back to the start of the application

Highly Scalable

> The AppCOE GUI-based wizard reads your application to custom generate optimized Linux/POSIX Interface code that is specific to your application resulting in increased performance and reduction of memory footprint

Target Hardware Independence

> Products support any target hardware supported by your target OS architecture, including 32/64 bit & SMP/UP architectures

In-House OS Support

> Can easily be extended to support your in-house OS

pSOS Interface API Coverage & Target OS Support

- You can find the supported pSOS APIs here:
  http://www.mapusoft.com/wp-content/uploads/documents/Release_Notes-pSOS-APIs.pdf
- You can find the supported pSOS v 1.4 APIs here:
  http://www.mapusoft.com/wp-content/uploads/documents/psos-classic-current-offerings.pdf

Below are the target operating systems supported by the Linux/POSIX Interface:

Android®	LynxOS-178®	QNX Neutrino RTOS®	µC/OS III™
eCOS®	micro-ITRON	RT Linux®	Unix®
LynxOS®	Freescale MQX®	Solaris®	VxWorks®
LynxOS-SE®	NetBSD®	ThreadX®	Windows®
	Nucleus®	FreeRTOS™	In-House

- A free evaluation can be downloaded here:
  http://mapusoft.com/downloads/
- You can contact MapuSoft to request a license key for evaluation here:
  http://mapusoft.com/contact
- User manuals & technical documentation can be found here:
  http://www.mapusoft.com/techdata/
- For any technical or sales questions please submit a ticket at the MapuSoft support site here:
  http://mapusoft.com/support/

MAPUSOFT
www.mapusoft.com
1.877.MAPUSOFT