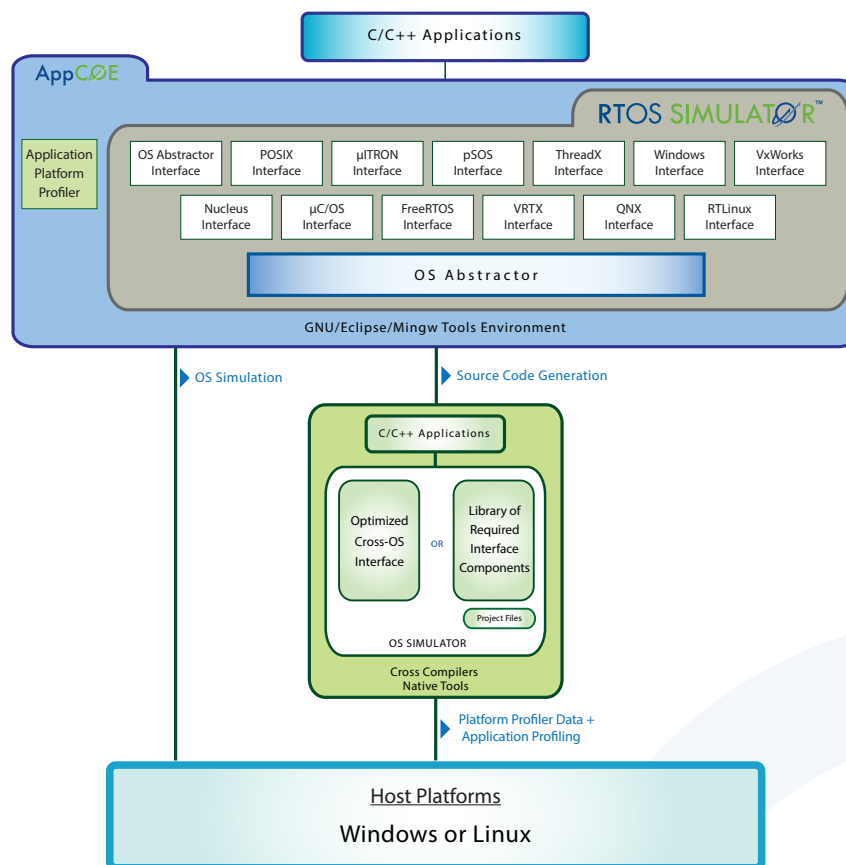


## DEVELOP AND TEST ON A HOST MACHINE WITHOUT TARGET HARDWARE

MapuSoft's RTOS Simulator allows engineers to develop and test OS Abstractor® applications on Windows or Linux host environments. RTOS Simulator eliminates the need for the for expensive target hardware during development. Without the need for the target hardware, development and testing can begin much earlier. The result is reduced hardware requirements and a shorter time to market.

RTOS Simulator also provides a virtualized test platform to simulate a system of applications interacting with each other on one or more CPU cores through simulated devices. Optionally, RTOS Simulator is available with source code to simulate OS Abstractor® applications integrated with native tools and/or software on Windows or Linux target environments.

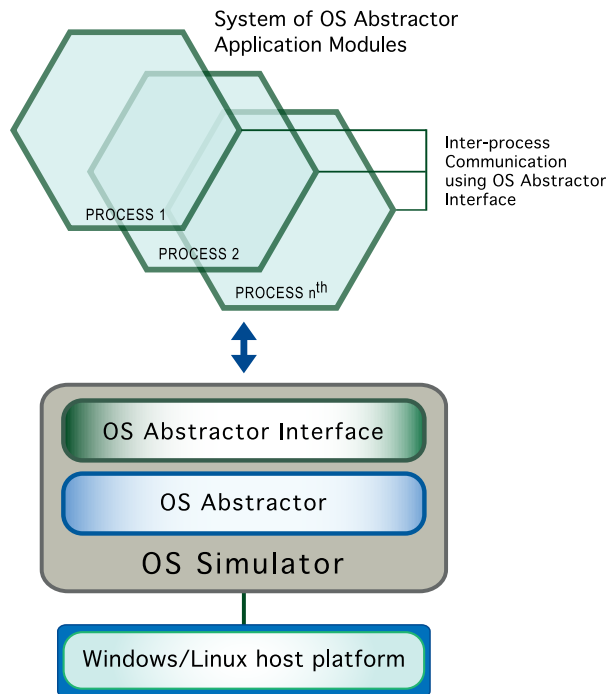
## USING RTOS Simulator AS A DEVELOPMENT PLATFORM



RTOS Simulator is integrated with AppCOE, an Eclipse-based framework packaged with CDT, BIRT and GNU x86 tools, providing a state-of-the-art IDE for development and testing. OS Simulator provides the following features when used as a development platform:

- Allows you to simulate real-time applications on Windows or Linux hosts by hardening and optimizing the underlying OS platform
- OS Abstractor Interface in non-source is provided in object format for development, simulation, testing and integration of applications on a x86 host environment
- Optionally, the OS Abstractor Interface library is available in full source code format for use with target native tools/software on Windows or Linux
  - > Source code option allows for gathering profiler data regarding the application and the OS Abstractor Interface so that they can be optimized

## USING RTOS Simulator AS A VIRTUALIZED TESTING PLATFORM



RTOS Simulator provides the ability to simulate, test and run an entire system of C/C++ OS Abtractor applications on a Windows or Linux host. Host-based testing offers more hardware resources, less complexity and lower costs when compared to testing on a target platform. RTOS Simulator provides the following features when used as a virtualized testing platform:

- Ability to do modular testing
  - > Allows applications to be broken down into separate processes with dedicated heap memory and kernel resources so that individual modules can be debugged further without crashing others
  - > Can load or re-start other processes dynamically from within an application or statically load them from command prompt
  - > Simulate interacting applications with each other on one or more CPU cores using OS Abtractor Interface for inter-process communication
  - > Shared tiered memory pools allow effective application-level data communication with zero copy and without having to pass through physical or virtual devices
- Easy to develop a prototype by creating low-level simulated devices using OS Abtractor APIs

### RELEVANT LINKS

- You can find the list of supported OS Abtractor APIs here:  
[http://www.mapusoft.com/wp-content/uploads/documents/Release\\_Notes-OS-Abtractor-APIs.pdf](http://www.mapusoft.com/wp-content/uploads/documents/Release_Notes-OS-Abtractor-APIs.pdf)
- A free evaluation can be downloaded here:  
<http://mapusoft.com/downloads/>
- For any technical or sales questions please submit a ticket at the MapuSoft support site at this link:  
<http://mapusoft.com/support/>