	pntOS™	SCORPION
Target audience	PNT application developer	EE masters student
Modular software architecture	Yes	Yes
Plugin architecture	Yes	No
Designed to combine vendor solutions without sharing source code	Yes (both proprietary & non-proprietary plugins)	No
Intended for operational use	Yes	No
Fully government-owned	Yes	Yes
Focus on software development kit (SDK) and documentation	Yes	No
Includes modular integrity framework	Yes	No
Assumed state space	Arbitrary states	Scarab: error-state PNT
Required routine dependencies	None (other than libc)	Java Runtime Environment (large memory overhead)
Languages supported	Written in C; comes w/ Python bindings; plugins can be written in almost any language	Java, MATLAB, Python, any language that compiles to Java bytecode
Methods of Use	Completely arbitrary (vehicle, dismount, air, ground, 15 state IMU, higher-order IMU error model, etc.)	Scarab: assumed 15 state error model, IMU required
Deployment scope	Operational, targeting real-time, APIs follow MIRSA, includes FACE plugin	Academic, bench testing/proof-of-concept platforms only (Java)
Supported hardware architectures	Nearly all CPUs (only requires a C89 compiler)	Java supported processors

pntOS™

Open. Modular. Pluggable.

pntOS.com