# System Requirements

### Tractor Engine

*Central job queue, installed on **one** host only.*
C++, Python, Postgresql (bundled)
Compatible Operating Systems: Linux 64-bit (gcc4.4), macOS (12.x+)

### Tractor Blade

*Task execution server, installed on render farm hosts.*
Stand-alone pure Python package, compatible with py2.7 and py3.6+
Uses stock Python library modules only.
Runs with the local site-installed Python (or venv) as a zipapp or pip installed wheel.
Also included in the full Tractor installer using the bundled python.
Compatible Operating Systems: Linux-64, macOS 12.x+, and Windows 7+.

### Tractor Dashboard

*Web-browser based user interface, job and blade information and control.*
Pure javascript, served from tractor-engine. No platform-specific plugins required.
Compatible Web Browsers: Chrome, Firefox, Safari, and Edge.

### Tractor Job Submission and Query

*Advanced command line tools on user workstations and scripting APIs.*
Scripting APIs for Job Authoring, Submission, and Query, downloadable wheels for pip install into local Python 2.7 or 3.6+
Command-line submission and alternate API installer downloadable as stand-alone zipapp for Python 2.7 or 3.6+.
Uses stock Python library modules only.
Also included in the full Tractor installer using the bundled python.
Compatible Operating Systems: Linux-64, macOS 12.x+, and Windows 7+.

### RenderMan DCC Integrations

*Job Authoring and Submission for supported RenderMan DCC integrations.*
The Job Authoring and Submission Python3 API modules are built-in as part
of the RenderMan integrations into Houdini, Katana, Maya, and Blender.