ZAPATA

QUANTUM STRATEGY ASSESMENT | PROOF OF CONCEPT
CUSTOM QUANTUM SOFTWARE | ORQUESTRA™ QUANTUM PLATFORM

Introducing Orquestra™, the Quantum Platform by Zapata

Compose quantum workflows and execute them across the full range of quantum technologies

1. Compose

Build quantum-classical workflows from a library of modules.

Software Components:

- Orquestra™ Command Line Interface
- VSCode extension

2. Conduct

Submit workflows with our command line tool and Orquestra™ Quantum Engine (OQE) will execute tasks and manage data across the appropriate quantum or classical hardware, on premise or in the cloud.

Software Component:

- OQE Server

Deployment

- Zapata Cloud
- Your Cloud
- On Premise (2020)

Quantum Technologies

- Quantum-inspired Classical
- Quantum Annealers
- Quantum Simulators
- Gate Model Quantum Hardware

Orquestra™-Compatible Quantum Algorithms and Software Libraries

- Qiskit (IBM)
- Cirq (Google)
- Forest (Rigetti)
- pyAQASM (Atos)
- PennyLane (Xanadu - 2020)
- Q# (Microsoft - 2020)

3. Record

Results are packaged in a database for direct use or further analysis.

Software Component:

- Orquestra™ Data Correlation Server

With Orquestra™ you can:

- Author workflows in the YAML compatible Zapata Quantum Workflow Language (ZQWL)
- Work in Microsoft VSCode using custom composer extensions
- Submit to Zapata servers with command line tool
- Eliminate library lock-in -- open-source wrappers and circuit translators enable you to mix and match your favorite algorithms from existing quantum libraries
- Deploy to any Kubernetes Cluster
- Run in Orquestra™ Quantum Engine (OQE) hosted in Zapata's cloud, your cloud, or on premise in your datacenter
- Connect to all leading quantum technologies: simulators, quantum inspired classical, annealing & gate model
- Access curated results via a Mongo database
- Enjoy your favorite analysis tools such as Excel, Jupyter, or Tableau

Organizations use Orquestra™ in two ways:

Zapata builds you custom software that runs on the platform.

Zapata trains your team to develop your own solutions using Orquestra's robust suite of tools.

To request a demo or an invitation to our private beta, contact info@zapatacomputing.com