

# Introducing Orquestra™, the Quantum Platform by Zapata

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

<p><b>1. Compose</b></p> <p>Build quantum-classical workflows from a library of modules.</p>	<p><b>Software Components:</b></p> <ul style="list-style-type: none"> <li>• Orquestra™ Command Line Interface</li> <li>• VSCode extension</li> </ul>			
<p><b>2. Conduct</b></p> <p>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.</p>	<p><b>Software Component:</b></p> <ul style="list-style-type: none"> <li>• OQE Server</li> </ul> <hr/> <table border="0"> <tr> <td data-bbox="227 819 552 966"> <p><b>Deployment</b></p> <ul style="list-style-type: none"> <li>• Zapata Cloud</li> <li>• Your Cloud</li> <li>• On Premise (2020)</li> </ul> </td> <td data-bbox="552 819 941 997"> <p><b>Quantum Technologies</b></p> <ul style="list-style-type: none"> <li>• Quantum-inspired Classical</li> <li>• Quantum Annealers</li> <li>• Quantum Simulators</li> <li>• Gate Model Quantum Hardware</li> </ul> </td> <td data-bbox="941 819 1364 1092"> <p><b>Orquestra™-Compatible Quantum Algorithms and Software Libraries</b></p> <ul style="list-style-type: none"> <li>• Qiskit (IBM)</li> <li>• Cirq (Google)</li> <li>• Forest (Rigetti)</li> <li>• pyAQASM (Atos)</li> <li>• PennyLane (Xanadu - 2020)</li> <li>• Q# (Microsoft - 2020)</li> </ul> </td> </tr> </table>	<p><b>Deployment</b></p> <ul style="list-style-type: none"> <li>• Zapata Cloud</li> <li>• Your Cloud</li> <li>• On Premise (2020)</li> </ul>	<p><b>Quantum Technologies</b></p> <ul style="list-style-type: none"> <li>• Quantum-inspired Classical</li> <li>• Quantum Annealers</li> <li>• Quantum Simulators</li> <li>• Gate Model Quantum Hardware</li> </ul>	<p><b>Orquestra™-Compatible Quantum Algorithms and Software Libraries</b></p> <ul style="list-style-type: none"> <li>• Qiskit (IBM)</li> <li>• Cirq (Google)</li> <li>• Forest (Rigetti)</li> <li>• pyAQASM (Atos)</li> <li>• PennyLane (Xanadu - 2020)</li> <li>• Q# (Microsoft - 2020)</li> </ul>
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<p><b>3. Record</b></p> <p>Results are packaged in a database for direct use or further analysis.</p>	<p><b>Software Component:</b></p> <ul style="list-style-type: none"> <li>• Orquestra™ Data Correlation Server</li> </ul>			

## 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](mailto:info@zapatacomputing.com)