



Quantum Computing

Introduction to Amazon Braket and QPath[®]

Day 1

Agenda

Day 1

- Introductions
- Setup the hands-on environment
- Demo: QPU cost estimation
- Break
- Technical introduction to Amazon Braket
- Hands-on session
- Break
- Creating complete QuantumPath® solutions
- QuantumPath® Solutions preparation Hands On Lab

Day 2

- Summary of Day 1
- Creating complete QuantumPath® solutions
- Introduction to QuantumPath lifecycle and assets catalog
- Demo: Gate-based algorithm development in QuantumPath
- Break
- Demo: Quantum annealing software development in QPath®
- Preparing for Enterprise solutions: Hybrid Quantum-Classical architectures with qSOA®
- Summary and wrap up

Agenda – Day 1 (*)

- ❑ 14:00 – Introductions
- ❑ 14:10 – Setup the hands-on environment
- ❑ 14:45 – Demo: QPU cost estimation
- ❑ 15:00 – Break
- ❑ 15:05 – Technical introduction to Amazon Braket
- ❑ 15:30 – Hands-on session
- ❑ 16:30 – Break
- ❑ 16:35 – Creating complete QuantumPath® solutions
- ❑ 16:45 – QuantumPath® Solutions preparation Hands On Lab

() All times are UTC*



Your speakers



Nihit Pokhrel

Nihit Pokhrel is a Partner Solutions Architect at Amazon Web Services, working with HPC and Quantum Computing partners to help them build well-architected solutions. Her background is in computational chemistry focusing in the area of Molecular Dynamics. Nihit specializes in HPC for the Life Sciences industry.



José Luis Hevia

Software Architect & Software Solutions IT Manager of Alhambra IT. 25+ years of experience in consulting, design of HA-FT Enterprise Multilayer Solutions and technical training, using state of the art technologies. aQuantum Founder & Chief Technology Officer (CTO)



Juan Moreno

Juan is a Senior Amazon Braket Solutions Architect. His background is in infrastructure support for strategic customers, also managing teams and running operations at scale. He is passionate about quantum technologies and helping customers to get started with quantum computing. In his spare time he likes learning Chinese, practicing and teaching yoga, and spending quality time with his wife and friends.

Hands On Workshop



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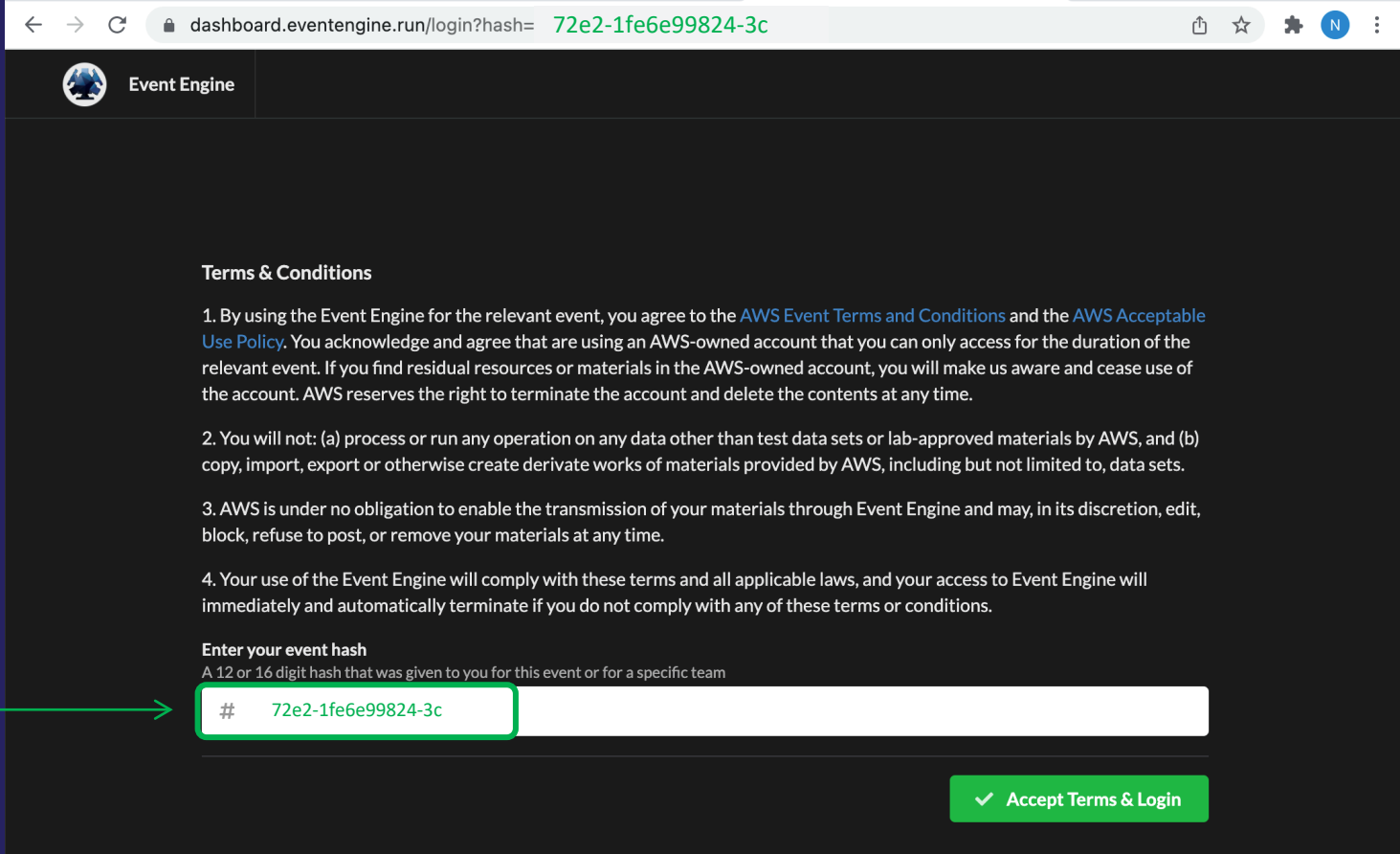
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Setup your environment: Event Engine Login

<https://dashboard.eventengine.run/login?hash=72e2-1fe6e99824-3c>



The screenshot shows a web browser window with the URL `dashboard.eventengine.run/login?hash=72e2-1fe6e99824-3c`. The page header includes the Event Engine logo and name. The main content area displays the following terms and conditions:

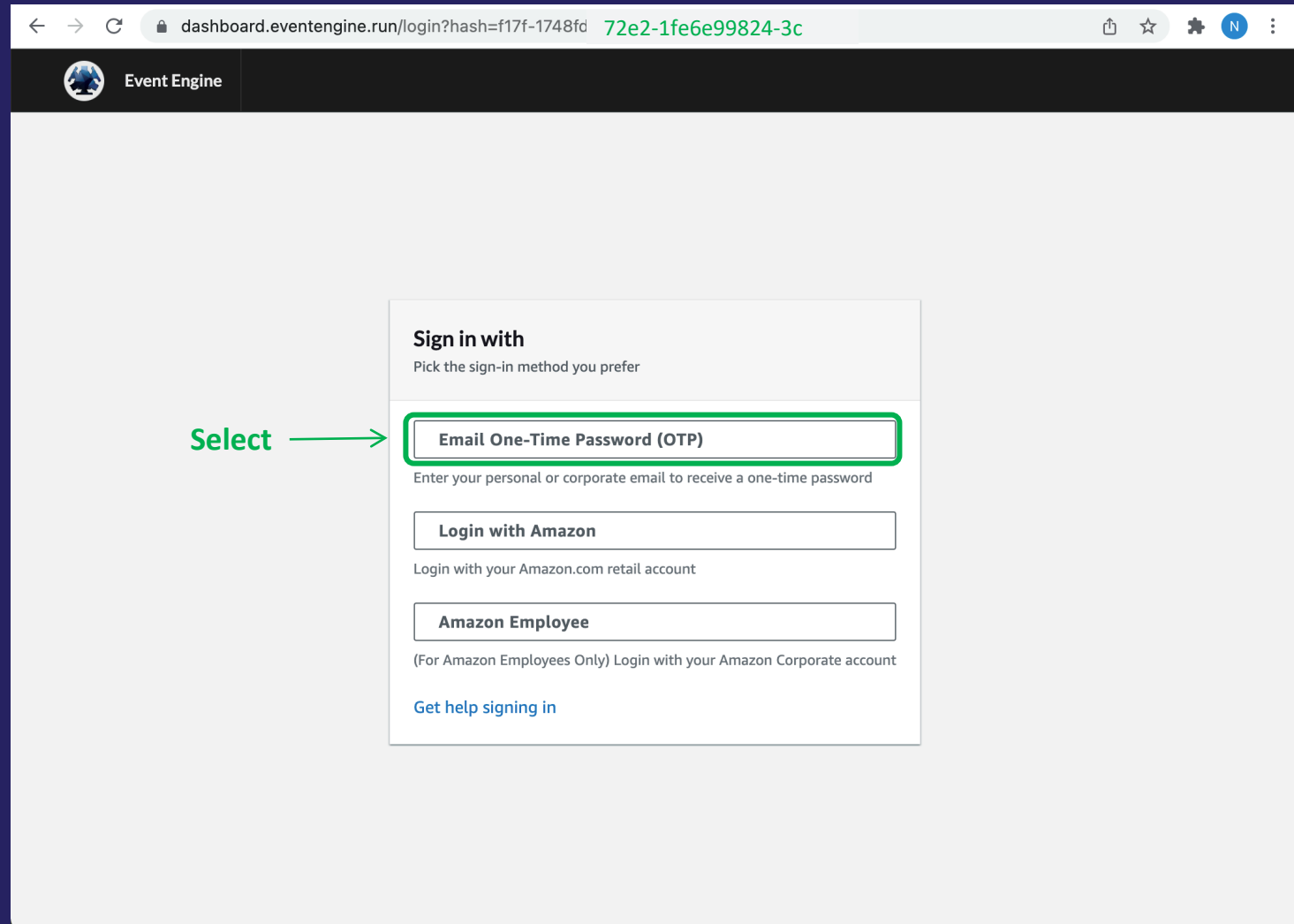
Terms & Conditions

1. By using the Event Engine for the relevant event, you agree to the [AWS Event Terms and Conditions](#) and the [AWS Acceptable Use Policy](#). You acknowledge and agree that are using an AWS-owned account that you can only access for the duration of the relevant event. If you find residual resources or materials in the AWS-owned account, you will make us aware and cease use of the account. AWS reserves the right to terminate the account and delete the contents at any time.
2. You will not: (a) process or run any operation on any data other than test data sets or lab-approved materials by AWS, and (b) copy, import, export or otherwise create derivate works of materials provided by AWS, including but not limited to, data sets.
3. AWS is under no obligation to enable the transmission of your materials through Event Engine and may, in its discretion, edit, block, refuse to post, or remove your materials at any time.
4. Your use of the Event Engine will comply with these terms and all applicable laws, and your access to Event Engine will immediately and automatically terminate if you do not comply with any of these terms or conditions.

Enter your event hash
A 12 or 16 digit hash that was given to you for this event or for a specific team

The form contains a label `#` and a text input field with the value `72e2-1fe6e99824-3c`. A green arrow labeled "Event Hash" points to this input field. Below the form is a green button with a checkmark icon and the text "Accept Terms & Login".

Setup your environment: Event Engine Login



dashboard.eventengine.run/login?hash=f17f-1748fd 72e2-1fe6e99824-3c

Event Engine

Sign in with
Pick the sign-in method you prefer

Select → **Email One-Time Password (OTP)**
Enter your personal or corporate email to receive a one-time password

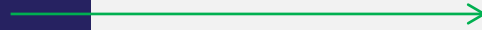
Login with Amazon
Login with your Amazon.com retail account

Amazon Employee
(For Amazon Employees Only) Login with your Amazon Corporate account

[Get help signing in](#)

Setup your environment: Event Engine Login

Enter your corporate email address

A screenshot of a web browser displaying the AWS training and certification login page. The browser's address bar shows a URL starting with 'us-east-1.signin.aws.training'. The page header features the AWS logo and the text 'aws training and certification'. The main content area is a light gray box titled 'One-time email passcode'. Below the title, it says 'Send a passcode to the email below.' followed by an 'Email' label and an empty text input field. At the bottom of the form are two buttons: 'Back' and 'Send passcode'. A blue link 'Get help signing in' is located below the buttons. The footer of the page contains links for 'Privacy' and 'Site terms', and a copyright notice for 2022 Amazon Web Services, Inc.

Setup your environment: Event Engine Login

The screenshot shows a web browser window with the URL `us-east-1.signin.aws.training/otp/challenge?state=ZXIKMWMYVnIVRzI2YkVsa0lqb2lkWE10WldGemRDMHhYMHR...`. The page header features the AWS logo and the text "aws training and certification". The main content area displays a "One-time email passcode" form. The form includes a message: "We sent a passcode to ngnat@amazon.com. You should receive it within 5 minutes." Below this, it says "Passcode (9-digit) [Resend passcode](#)". A text input field contains the passcode "380068581". There are "Back" and "Sign in" buttons. A link "Get help signing in" is at the bottom of the form. At the bottom of the page, there are links for "Privacy" and "Site terms", and a copyright notice: "© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved."

The screenshot shows an email notification from "no-reply@us-east-1.otp.signin.aws.training". The email body contains a caution: "CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you can confirm the sender and know the content is safe." Below the caution, it states "Your one-time passcode is: 380068581". A green arrow points from the passcode in the email to the passcode input field in the login form above.

Setup your environment: Event Engine Login



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- ❑ 16:45 – QuantumPath® Solutions preparation Hands On Lab



Learning Objectives

- Understand how Regions work in AWS
- Know how to find account details
- Familiarize with ancillary services
- Activate Amazon Braket
- Create a notebook instance
- Understand the cost structure of Amazon Braket

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Break



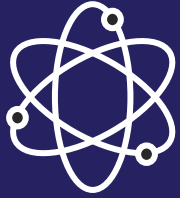
We will start again at
15:05 UTC

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Quantum Computing at AWS



AWS Center for Quantum Computing

Research and development



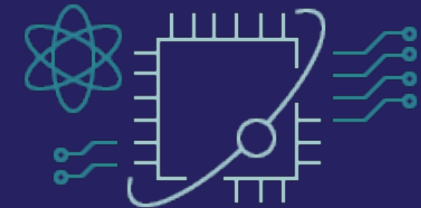
Quantum Solutions Lab

State-of-the-art quantum and classical solutions



AWS Partner Network

Community of quantum computing partners



Amazon Braket

Fully managed quantum computing service

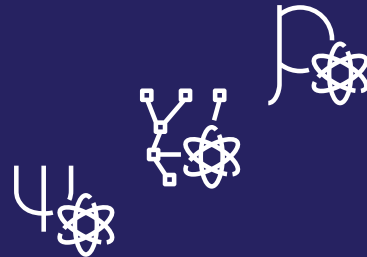
Amazon Braket – the AWS quantum computing service

A fully managed service that makes it easy for scientists and developers to explore quantum computing



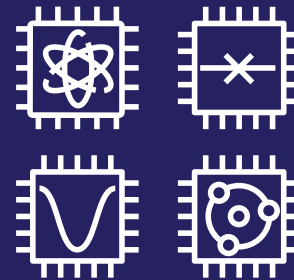
Build

- Amazon Braket SDK
- Jupyter notebooks
- Command line interface
- Leverage multiple cloud services



Test

- Local simulators for rapid testing
- High-performance simulators



Run

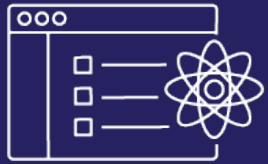
- Access multiple quantum computers
- Combine quantum and classical resources



Analyze

- Monitor algorithms in almost real time
- Analyze algorithm results and performance

Local and managed simulators

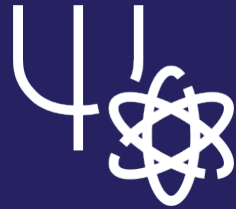


Local simulator

Part of Braket SDK

Fast and convenient prototyping

Number of qubits based on hardware

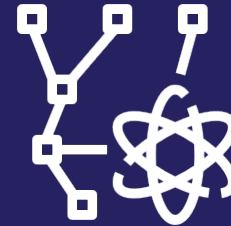


SV1: State Vector simulator

Quantum circuit with up to 34 qubits

Stores the full wave function state

Concurrency: Default 35, max 50

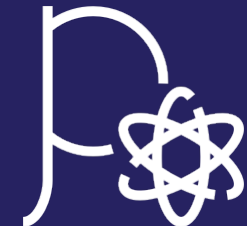


TN1: Tensor Network simulator

Quantum circuit with up to 50 qubits

Encodes quantum circuits into a structured graph

Concurrency: Default 10, max 10



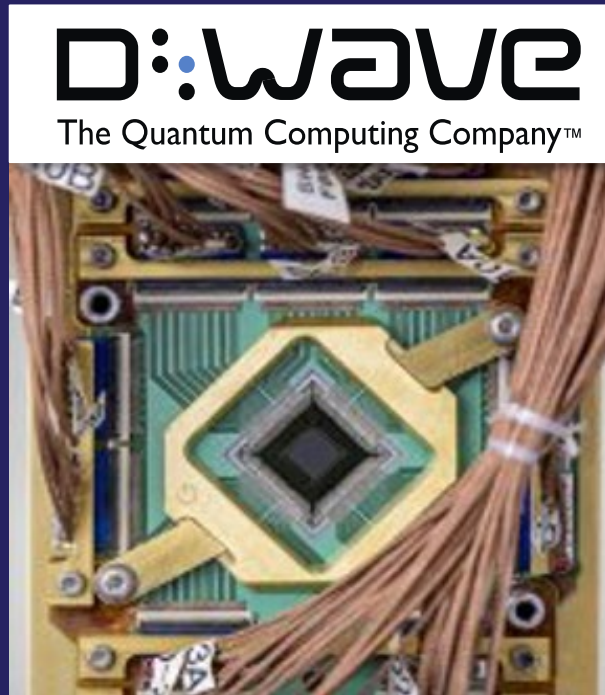
DM1: Density Matrix simulator

Quantum circuit with up to 17 qubits

Run multiple circuits in parallel with noise simulation

Concurrency: Default 35, max 50

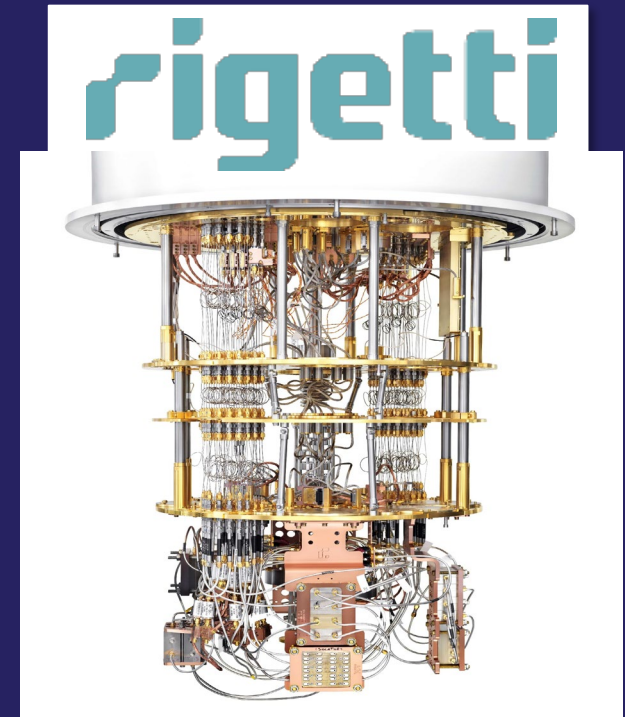
Quantum Computers



Quantum annealer



Trapped ions



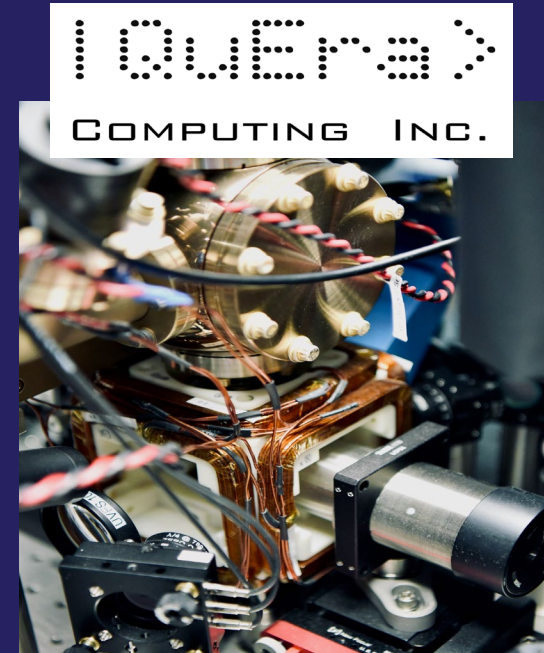
superconducting

New hardware coming to Amazon Braket



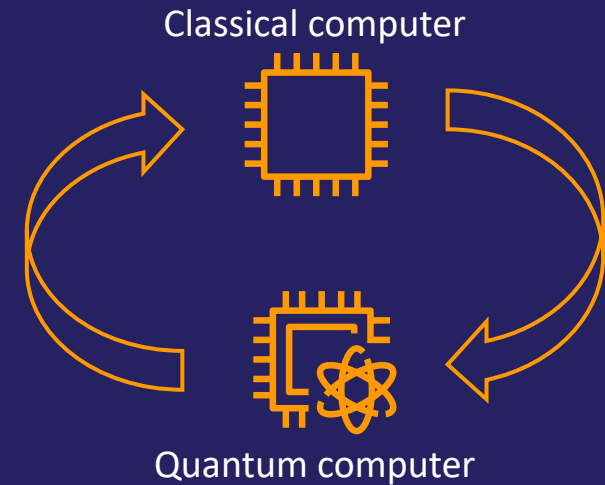
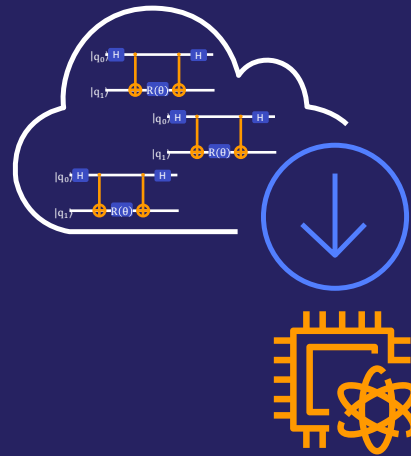
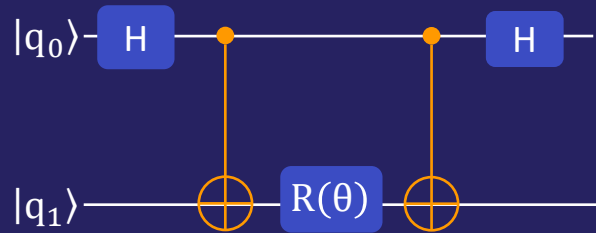
Superconducting

(Now Live)



Rydberg atoms

Shots, tasks, and Hybrid Jobs



Shot

Single execution of quantum operation on a device

Task

Series of repeated shots on a device
(10s–10,000s shots per task)

Hybrid job

Sequence of classical and quantum compute cycles
(10s to 1,000s of tasks per job)

docs.aws.amazon.com/braket/latest/developerguide/braket-jobs.html



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Learning Objectives

- Device availability and status
- Geographical scope of a QPU
- QPU architecture and design models
- Pick the right simulator for the right job
- Build and run circuits in simulators and QPUs
- Find tasks and interpret results

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Break

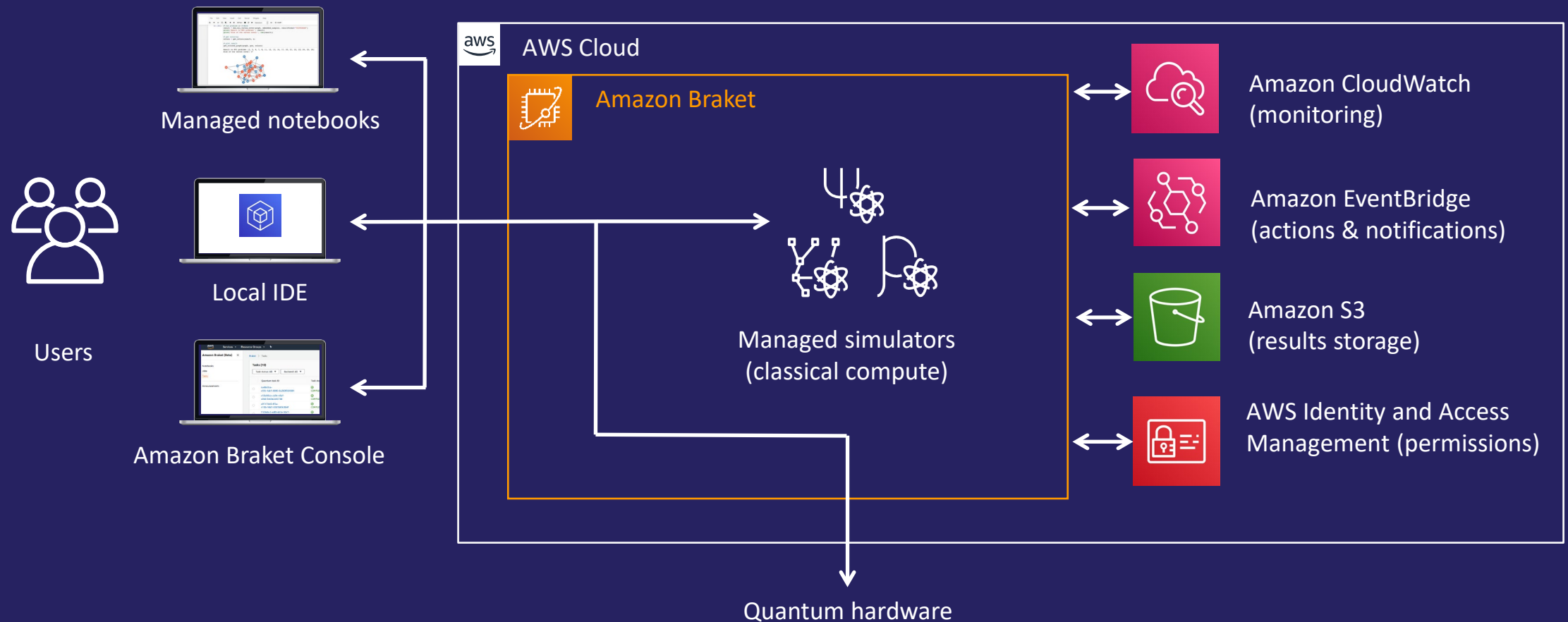


We will start again at
16:35 UTC

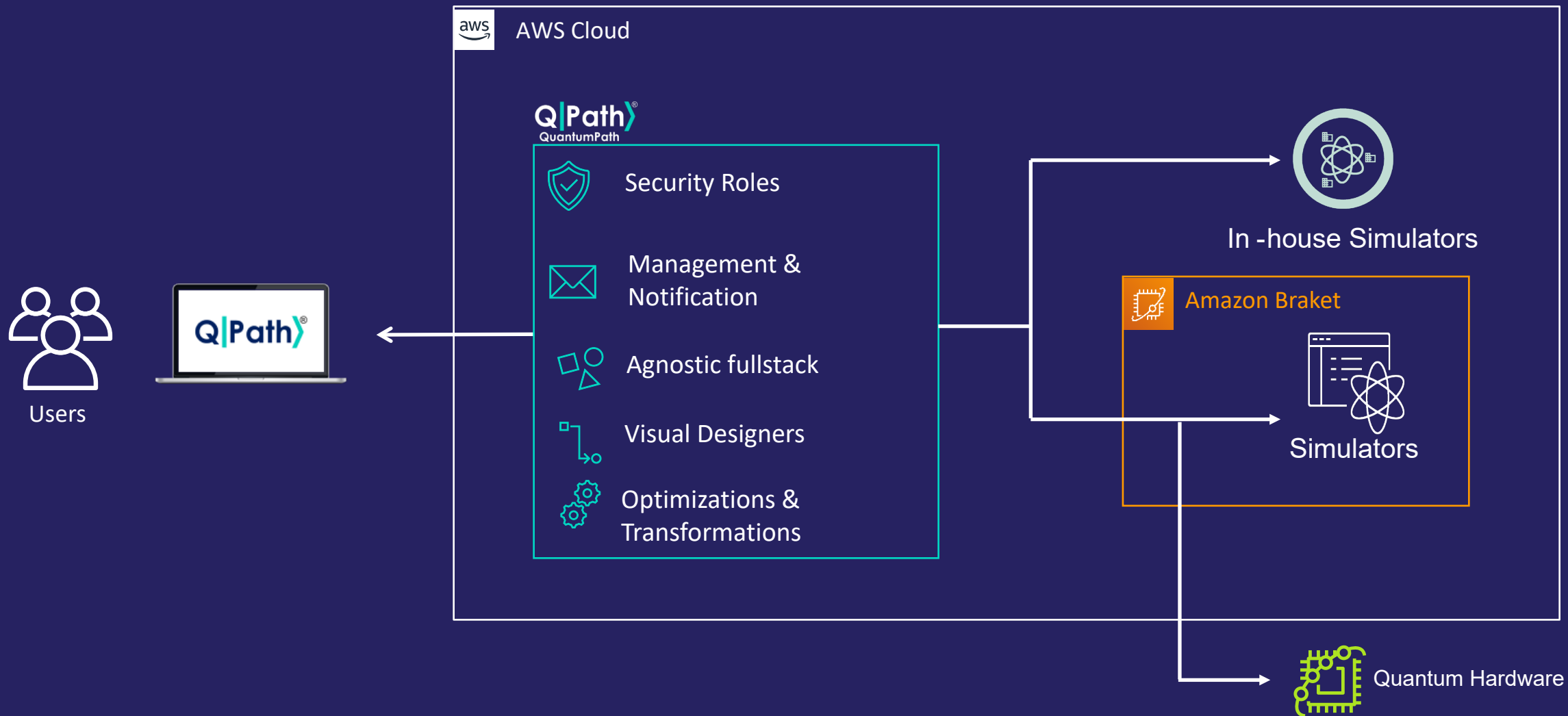
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Amazon Braket Architecture



Amazon Braket and QuantumPath[®]



QuantumPath takes it further

- Explore annealing for optimization problems
 - Evaluate gate compatibility across devices
 - Explore circuit anatomy
-
- All of this without having to worry about infrastructure

...while adhering to AWS building practices

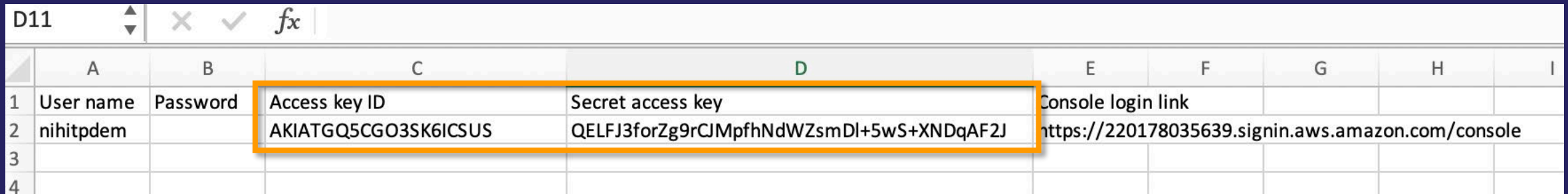
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Access QuantumPath®

1. Copy credentials for CLI access

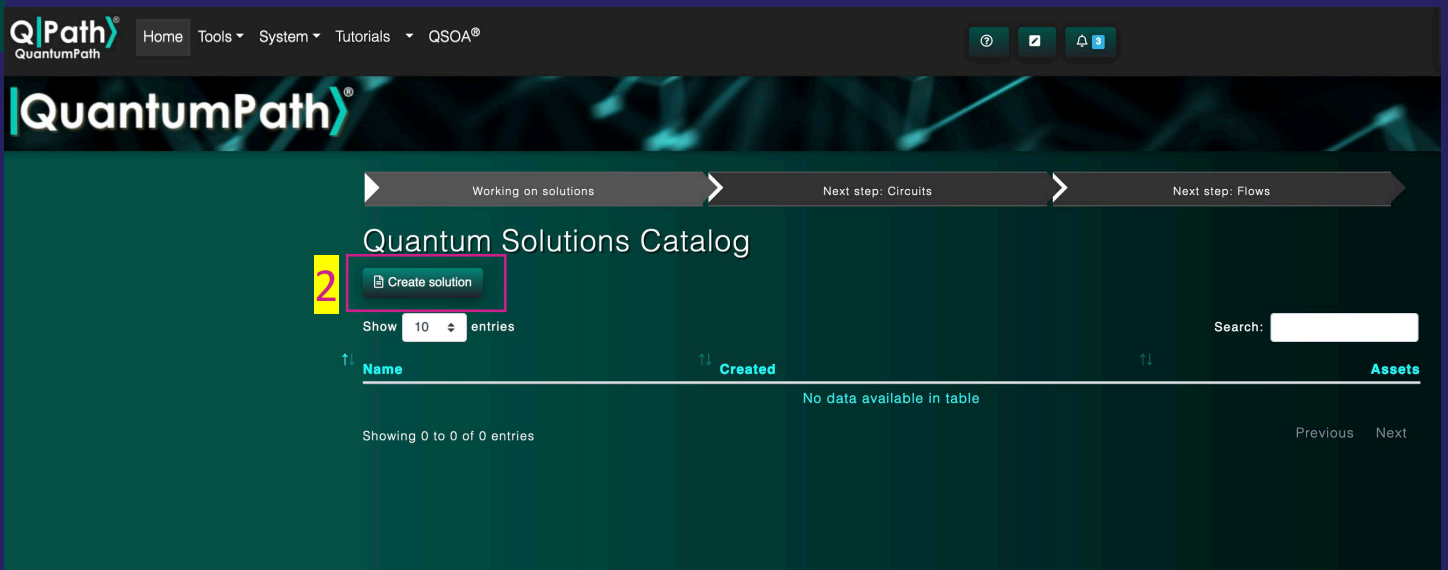
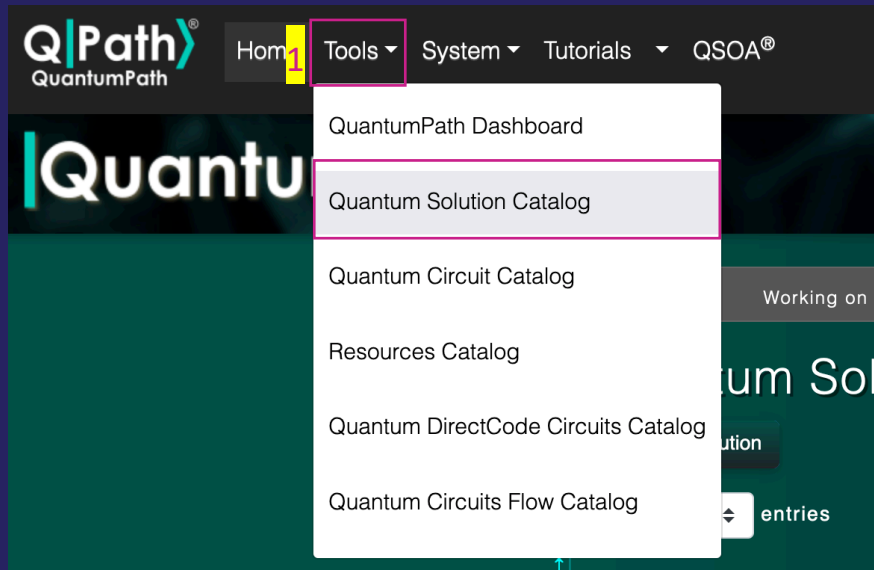


	A	B	C	D	E	F	G	H	I
1	User name	Password	Access key ID	Secret access key	Console login link				
2	nihitpdem		AKIATGQ5CGO3SK6ICSUS	QELFJ3forZg9rCJMpfhNdWZsmDI+5wS+XNDqAF2J	https://220178035639.signin.aws.amazon.com/console				
3									
4									

2. Access QuantumPath®

<https://core.quantumpath.app/TeamEngagement/TEEnrollmentForm/eyJDb21wYW55TmFtZSI6IkFNQVpPTkFRVUFOVFVNIiwiRW5nYWdlbWVudEtleSI6IkFXU0FRVV8xMTA0MTk3NCJ9>

Access QuantumPath®



Access QuantumPath

The image shows a composite screenshot of the QuantumPath web application. The main interface is titled "Quantum Solution (Edition)" and includes fields for Name, Description, and Creation date. A "Save" button is highlighted with a yellow box labeled "3".

An overlay window titled "Setup providers" is shown, listing various quantum providers. The "AMAZON BRAKET" provider is selected, and its "Enabled Device name" list is expanded. The list contains three entries, each with a checkbox and a "6" in a yellow box. The "AMAZON BRAKET" header is highlighted with a yellow box labeled "4". The "Enabled Device name" header is highlighted with a yellow box labeled "5".

A second overlay window titled "Quantum Device Credentials" is shown, containing a form for setting connection data. The form includes fields for User, Password, and Token, each with a yellow box containing an AWS credential name. The "Update" and "Cancel" buttons are at the bottom.

Yellow boxes with numbers 3, 4, 5, 6, and 7 are used to highlight specific UI elements across the different windows.

Q&A & Wrap Up Day 1



Next Steps

Survey

<https://survey.immersionday.com/CODE>

Follow up

Nihit Pokhrel – nihitp@amazon.com

Juan Moreno – juanmb@amazon.com





Quantum Computing

Introduction to Amazon Braket and QPath[®]

Day 2

Your speaker



José Luis Hevia

Software Architect & Software Solutions IT Manager of Alhambra IT. 25+ years of experience in consulting, design of HA-FT Enterprise Multilayer Solutions and technical training, using state of the art technologies. aQuantum Founder & Chief Technology Officer (CTO)

Agenda – Day 2 (*)

- ❑ 02:00pm – Summary of Day 1
- ❑ 02:14pm – Creating complete QuantumPath® solutions
- ❑ 02:30pm – Introduction to QuantumPath lifecycle and assets catalog
- ❑ 03:00pm – Demo: Gate-based algorithm development in QuantumPath
- ❑ 03:45pm – Break

- ❑ 04:00pm – Demo: Quantum annealing software development in QuantumPath®
- ❑ 04:30pm – Preparing for Enterprise solutions:
Hybrid Quantum-Classical architectures with qSOA®
- ❑ 04:50pm – Summary and wrap up



Creating complete QuantumPath[®] solutions

Before knowing what QuantumPath[®] is, let's quickly see what we mean by Solution

1

a classic software solution responds to the construction of a product that covers business needs

2

With the appearance of quantum technology, it is necessary to reassess the impact on the development of software solutions

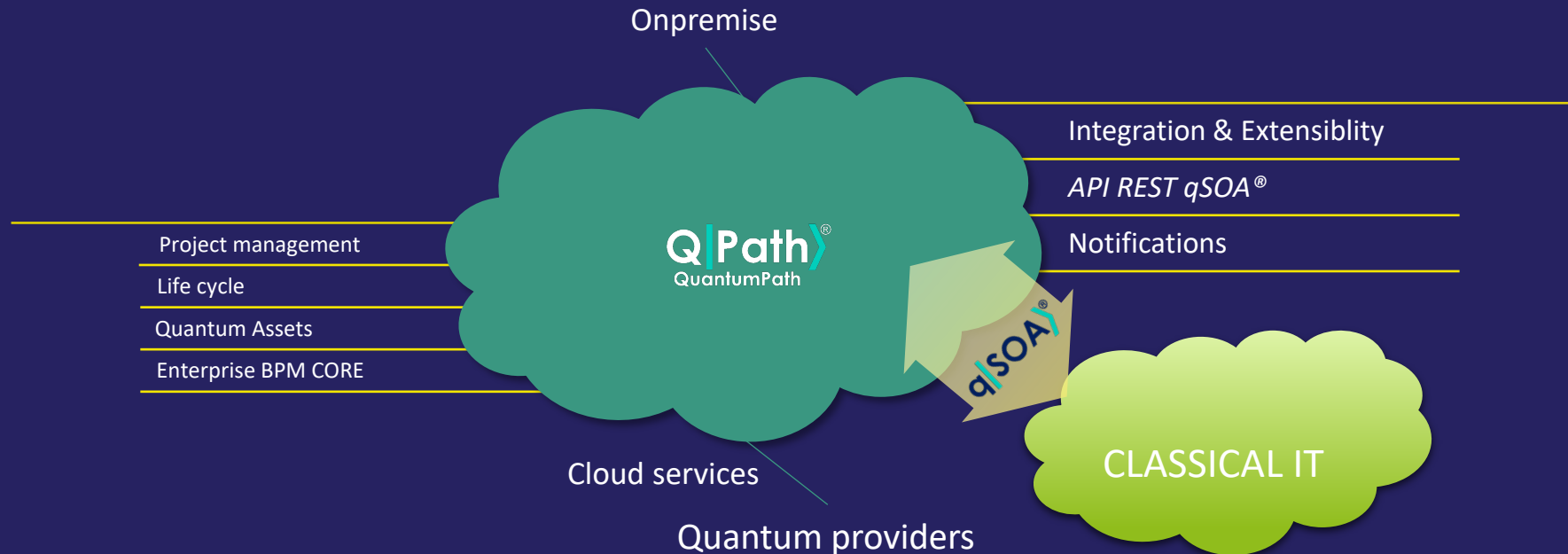
3

Quantum Solution: a software solution responds to the construction of a product that covers business needs, using the advantage of the Quantum Computing

In QuantumPath[®] we have design from scratch a complete platform, to make easier the creation of Software Solutions that uses the power of Quantum Computing technologies and integrates them into Classical solutions

QuantumPath[®] overview

- A complete lifecycle pipeline to create professional quantum software solutions
- From the creation of the quantum algorithm through its development, testing and implementation, to its deployment and reuse
- Support of different types of quantum hardware: gate-based, quantum annealing, etc.
- qSOA[®], to integrate classical and quantum through open, robust and transparent protocols



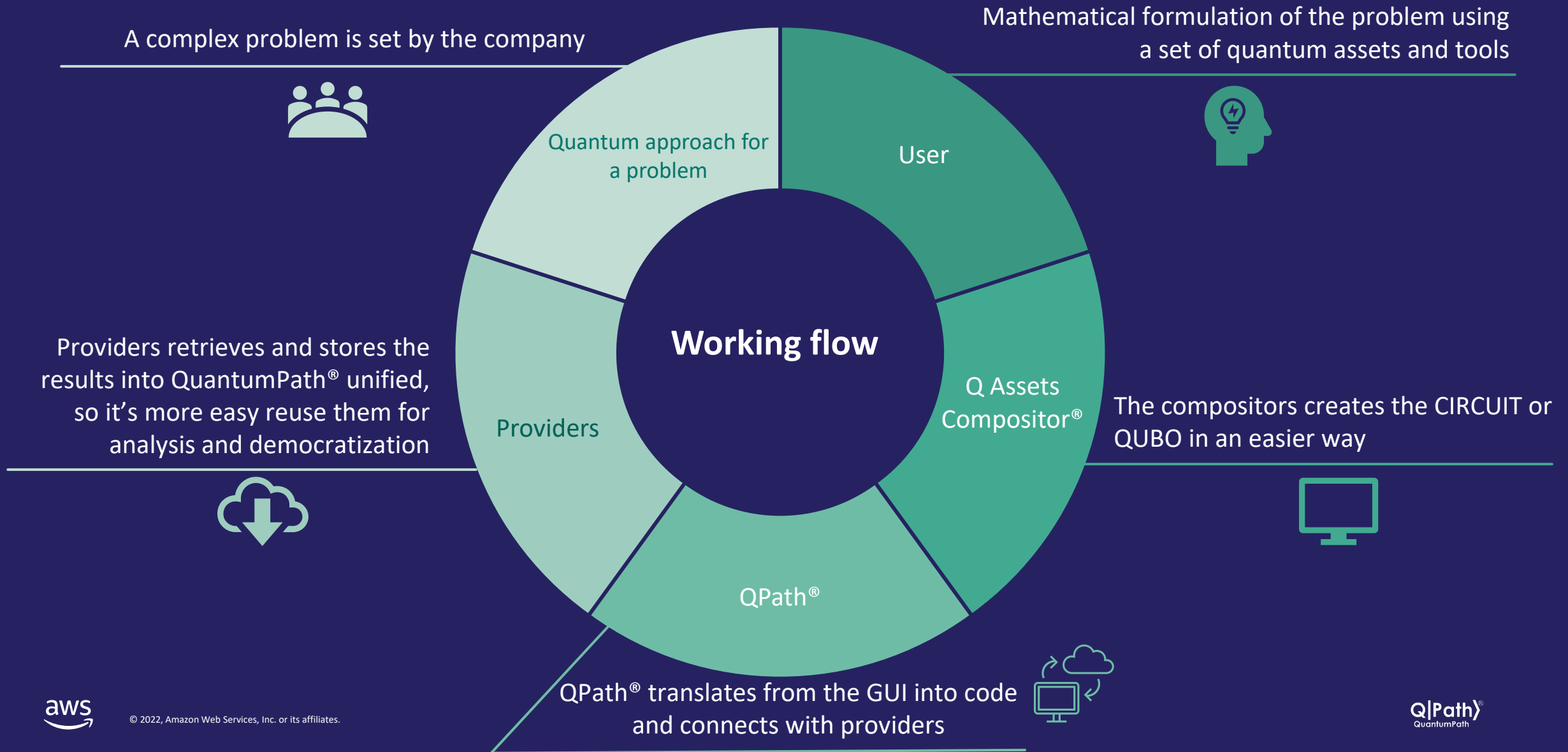
QuantumPath[®] overview

An agnostic platform that allows circuit definition & QUBO formulation through an intuitive code-free interaction

- 1 Identify a problem that need to be solved using Quantum Power
- 2 Determine gates, variables, or interactions and constraints, including quadratic and linear terms
- 3 Create the circuit or Map into QUBO formulation

Q Assets Compositor[®] to create the circuit or formulate the QUBO matrix for you, connects with the quantum computer providers servers and retrieves the result

QuantumPath[®] overview



QuantumPath[®] overview

Pipelines

Graphical

An easier implementation of the circuit and the QUBO matrix



Pseudocode

An intermediate level of abstraction



Direct Code

Programming level lovers who enjoy the provider SDKs



Creating Complete QuantumPath[®] Solutions

- 1 Analyze the type of problem to solve determines technology
- 2 Create a QPath Solution cover the project definition and it's technology requirements
- 3 Maintain the QPU providers and select based on different criteria
- 4 Create the quantum assets, try them, analyze results through lifecycle
- 5 Publish the ready to production flows and integrate them in classical IT systems

Hands On Workshop

Prepare QuantumPath Solution



Prepare the Environment

- Setup your profile options to make better the experience...

1

2

QuantumPath®

Home Tools System Tutorials QSOA®

QuantumPath®

Working on solutions

jhevia.AWSAQ
Amazon aQuantum E

Edit your user profile

Manage User Profile

Edit User Information

Property	Value
GDPR Policy Accepted	<input checked="" type="checkbox"/> GDPR accepted
Save all	<input checked="" type="checkbox"/> Save all
Auto compile	<input checked="" type="checkbox"/> Auto compile
Auto Transpile	<input checked="" type="checkbox"/> Auto transpile
Send compilation notification	<input type="checkbox"/> Compilation notification
Send transpilation notification	<input type="checkbox"/> Transpilation notification
Send execution notification	<input type="checkbox"/> Execution notification

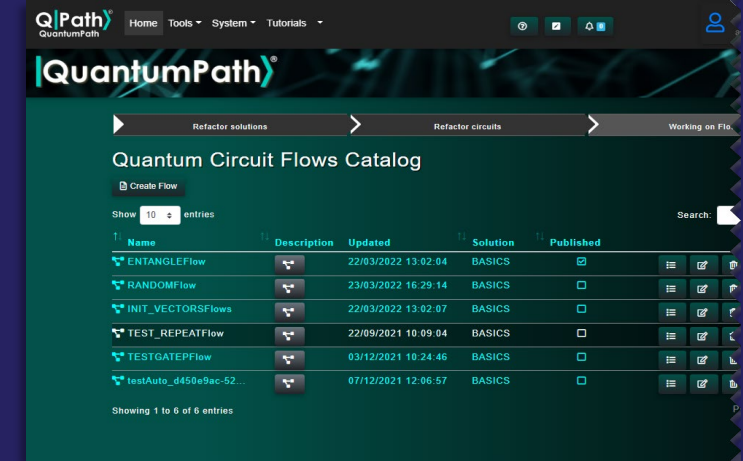
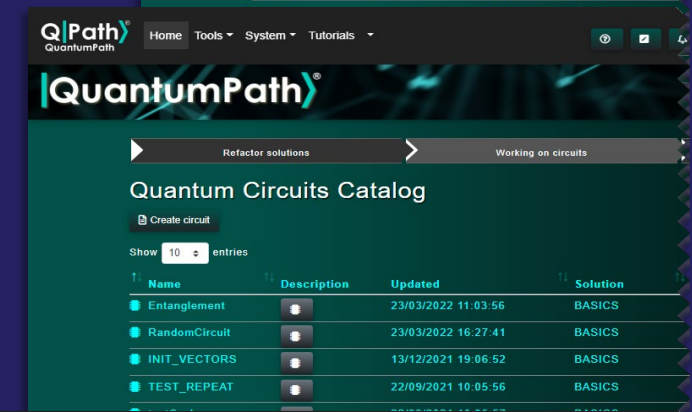
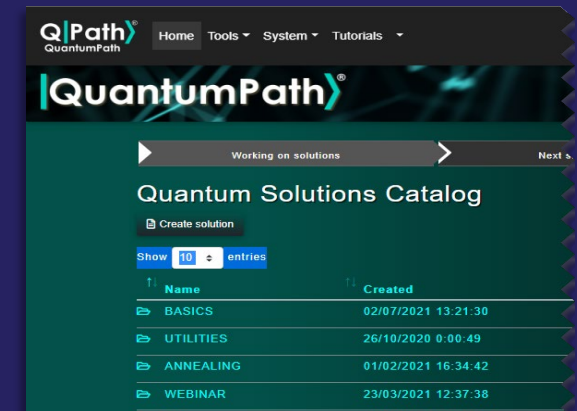
Save profile Show License Info

Learning Objectives

- Know lifecycle and assets catalog
- Develop gate-based algorithm development
- Formulate and implement graphically an annealing problem
- Understand the integration between quantum and classical systems

QuantumPath[®] lifecycle and assets catalog

- 1 The solution is the “box” inside you store the assets that compose a quantum application
- 2 The Circuit Assets are the atomic pieces that let the user the creation of the pieces of the quantum program puzzle, that can be GATES “pieces” or “Annealing” pieces.
- 3 The Flows Assets are the “main” routines that put the Circuits on the run, orchestrating their execution and conditions
- 4 The Assets pass through compilation and transpilation pipelines to validate the quantum application pieces
- 5 At the end, you execute and experiment with the results
- 6 And decide what flows can be executed from the outside business Use case



QuantumPath® lifecycle and assets catalog

Quantum Circuit (Creation)

Name: MyCircuitEntangle
Namespace: AMAZON.Events.QPath.GatesDemos
Solution: BASICS
QuantumType: QUANTUM GATES
Description: My Entanglement Circuit demo
Circuit Body: circuit=[{"cols":["H"],["CTRL","Z"],["Measure"]}]

Buttons: Save, Back to list, Edit Circuit, Auto generate Flow (100 iterations by default, circuitname + random suffix)

QP Asset Compositor™ for Quantum Circuit

Menu, Export, Clear Circuit, Clear ALL, Undo, Redo, Version 1.0

Probes	Half Turns	Quarter Turns	Eighth Turns	Rotation Gates	Utils
	Z, Swap, Y	S, S ⁻¹ , Y, Y ⁻¹	T, T ⁻¹ , Y, Y ⁻¹	Rz, Ry, Rx, P	{, }

Circuit diagram showing H gate, CNOT, and Z gate.

1 CRUD uses cases

2 Metadata Edition

3 Visual designers

4 Actions over Assets

Quantum Circuit (Edition - Auto save)

Name: BoxesOptimization
Namespace: AMAZON.Events.QPath.AnnealDemos
Solution: ANNV2
QuantumType: QUANTUM ANNEALING
Description:
Circuit Body: [{"Parameters": [{"AuxData": [{"uid": "1dd94b8f-193b-4b3722539c7333", "Name": "Prices", "Value": [4, 1, 2, 3, 5]}, {"uid": "4200-86f5-bca553855115", "Name": "Weights", "Value": [4, 1, 2, 3, 5]}]}, {"Properties": [{"uid": "cfc3899a-01b0-4060-8c8b-90a9a861d4fc", "Name": "Boxes", "NumberOfVars": "5"}]}]}]

Creation Date: 08/09/2021 17:33:03, Update Date: 21/01/2022 10:57:29

Buttons: Save, Compile, Compilation details, Compilation results, Back to list, Edit Circuit

QP Asset Compositor™ for Annealing

PARAMETERS, AUXILIARY DATA, CLASSES, VARIABLES, RULES

Rules

Rule1: $1/5 \cdot \left(\sum_{i=1}^{Boxes} (-Prices_i) \cdot Boxes(i) \right)$

Rule2: $1 \cdot \left(\left(\sum_{i=1}^{Boxes} Weights_i \cdot Boxes(i) + 6 \right)^2 \right)$

Buttons: VIEW HAMILTONIAN, ADD RULE, CLOSE, Save changes



QuantumPath[®] lifecycle and assets catalog

The screenshot displays the QuantumPath interface. At the top, a navigation bar shows three steps: 'Refactor solutions', 'Refactor circuits', and 'Working on Flows'. Below this, the 'Quantum Circuit Flow (Edition - Auto save)' section contains a form with the following fields:

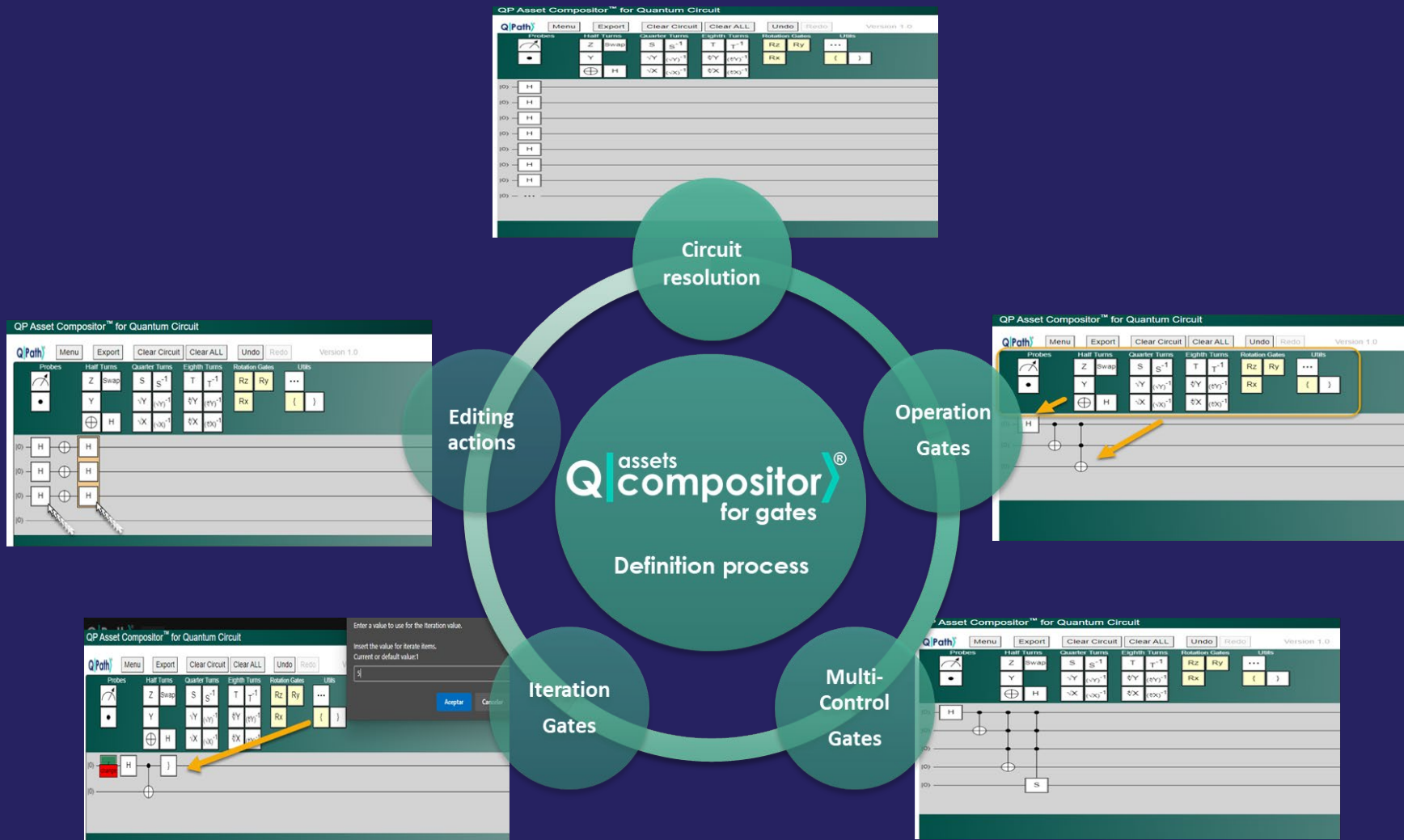
- Name: CAJAS_TESTFlow
- Namespace: BASICS
- idSolution: ANNV2
- Description: (empty)
- Flow Body:

```
{ "class": "go.GraphLinksModel",  
  "nodeDataArray": [  
    { "category": "Start", "text": "Start", "key": -1, "loc": "239.546875 79"},  
    { "category": "Circuit", "text": "CAJAS_TEST", "key": -3, "loc": "312.546875"},  
    { "category": "End", "text": "End", "key": -5, "loc": "297.546875 260"}  
  ]
```

Below the form are buttons for 'Edit Circuit Flow', 'Publish qSOA@' (with a 'Publish' toggle), and a table with 'Creation Date' and 'Update Date' columns. At the bottom, there are buttons for 'Save', 'Compile', 'Compilation details', 'Compilation results', 'Transpile', and 'Transpilation r'. The 'QP Asset Compositor™ for Flows' window is open, showing the 'QPPath Flowchart Editor'. It features a palette on the left with 'Start' (green circle), '0' (grey rectangle), 'BASICS.CAJAS_TEST' (blue rectangle), '1000' (diamond), 'End' (red circle), and 'Comment' (yellow rectangle). The main editor area shows a flowchart with a 'Start' node, a 'BASICS.CAJAS_TEST' node, and an 'End' node connected by arrows. At the bottom right of the editor are 'Close' and 'Save changes' buttons.

- 1 Drag'n'Drop features
- 2 Namespaces for Taxonomies
- 3 Multiple Shapes
- 4 Profile flags to automate tasks
- 5 High level and low level metadata

Gate-based algorithm development in QuantumPath[®]



- 1 Unlimited qubit scale
- 2 Full Agnostic gates
- 3 Editing helper actions
- 4 Operations over circuit
- 5 Agnostic multiControl gates
- 6 Rotation Pauli Gates

Hands On Workshop: Gate-based algorithm development



Break



We will start again at
16:00

Agenda – Day 2 (*)

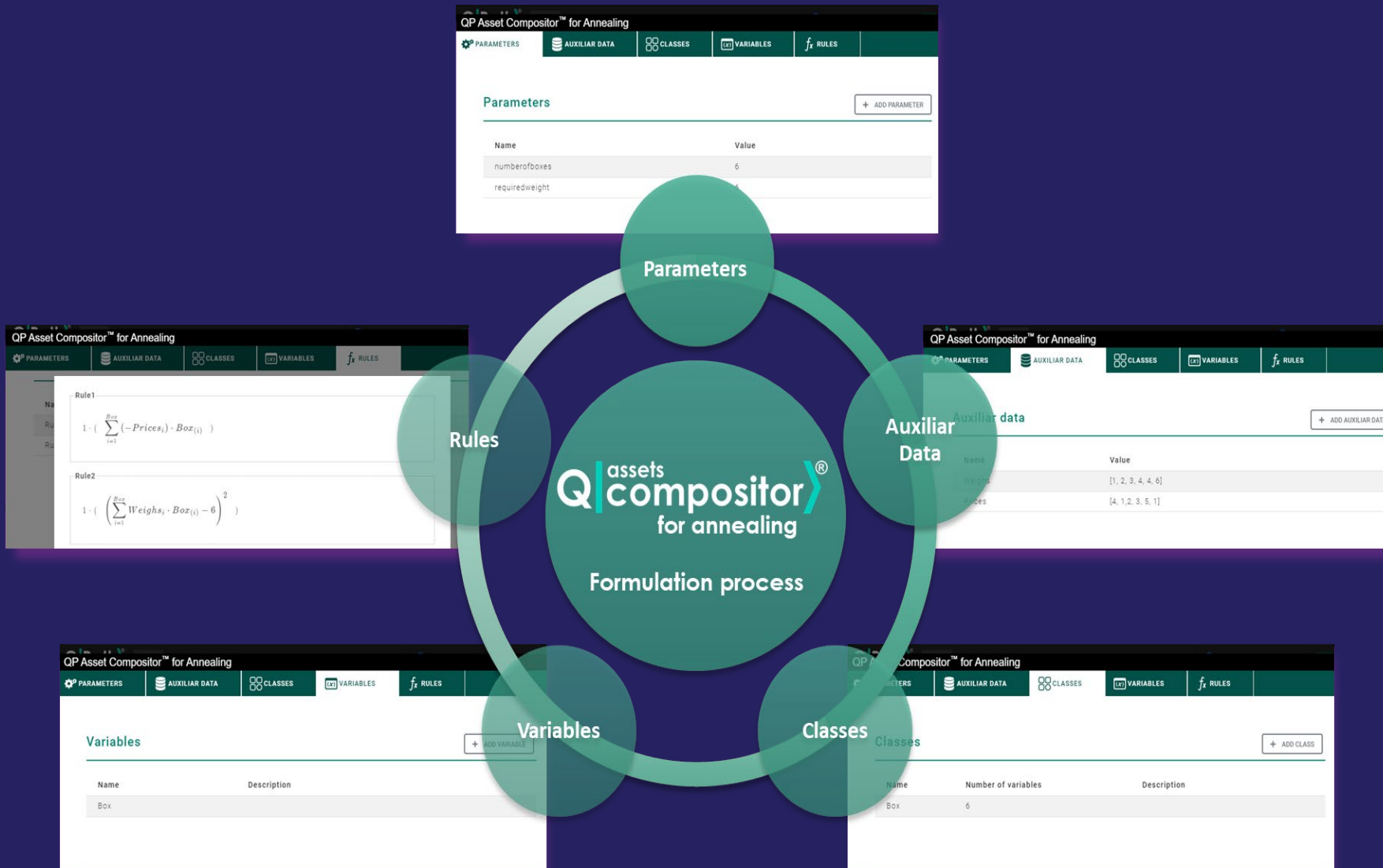
- ❑ 02:00 pm - Creating complete QuantumPath® solutions
- ❑ 02:30 pm - Introduction to QuantumPath lifecycle and assets catalog
- ❑ 03:00 pm - Demo: Gate-based algorithm development in QuantumPath
- ❑ 03:45 pm - Break

- ❑ 04:00 pm – Demo: Quantum annealing software development in QuantumPath®
- ❑ 04:30 pm – Preparing for Enterprise solutions:
Hybrid Quantum-Classic architectures with qSOA®
- ❑ 04:50 pm – Summary and wrap up

() All times are in UTC*



Quantum annealing software development in QuantumPath[®]



- 1 Agnostic Hamiltonian QUBO
- 2 Parameters, Auxiliar and Data
- 3 Classes and Variables
- 4 Visual rules design
- 5 Formulas and model validation
- 6 Hamiltonian representation

Hands On Workshop: Quantum Annealing software development in Qpath[®]

The knapsack problem

What is the set of items in the knapsack that weighs roughly 6 Kg and maximizes the total worth?



RULES

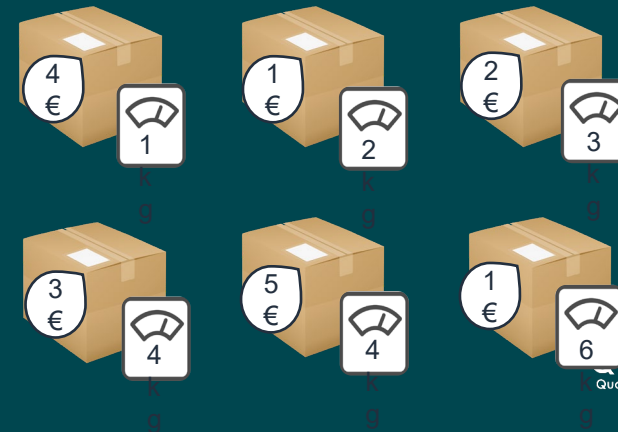
$$x_i = \begin{cases} 1 & \text{if item } i \text{ is in the box knapsack} \\ 0 & \text{otherwise} \end{cases}$$

$$\text{price} = \sum_i V_i x_i, \quad V_i \text{ price of item } i$$

$$\left(\sum_i P_i x_i - 6 \right)^2 = 0, \quad P_i \text{ weight of item } i$$

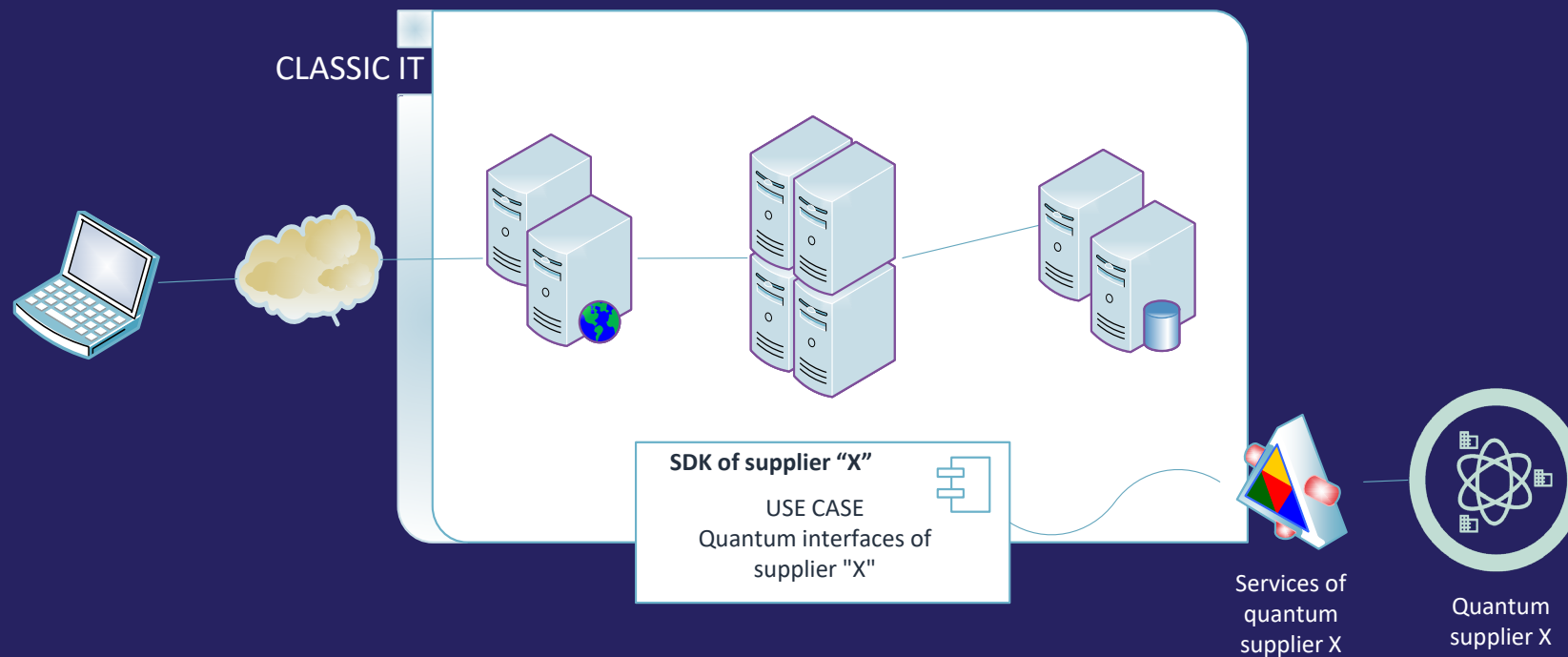
OPTIMIZATION

$$\min - \sum_i V_i x_i + \lambda \left(\sum_i P_i x_i - 6 \right)^2$$



Hybrid Quantum-Classical Architectures with qSOA[®]

How hybrid integration is usually approached in the current model...

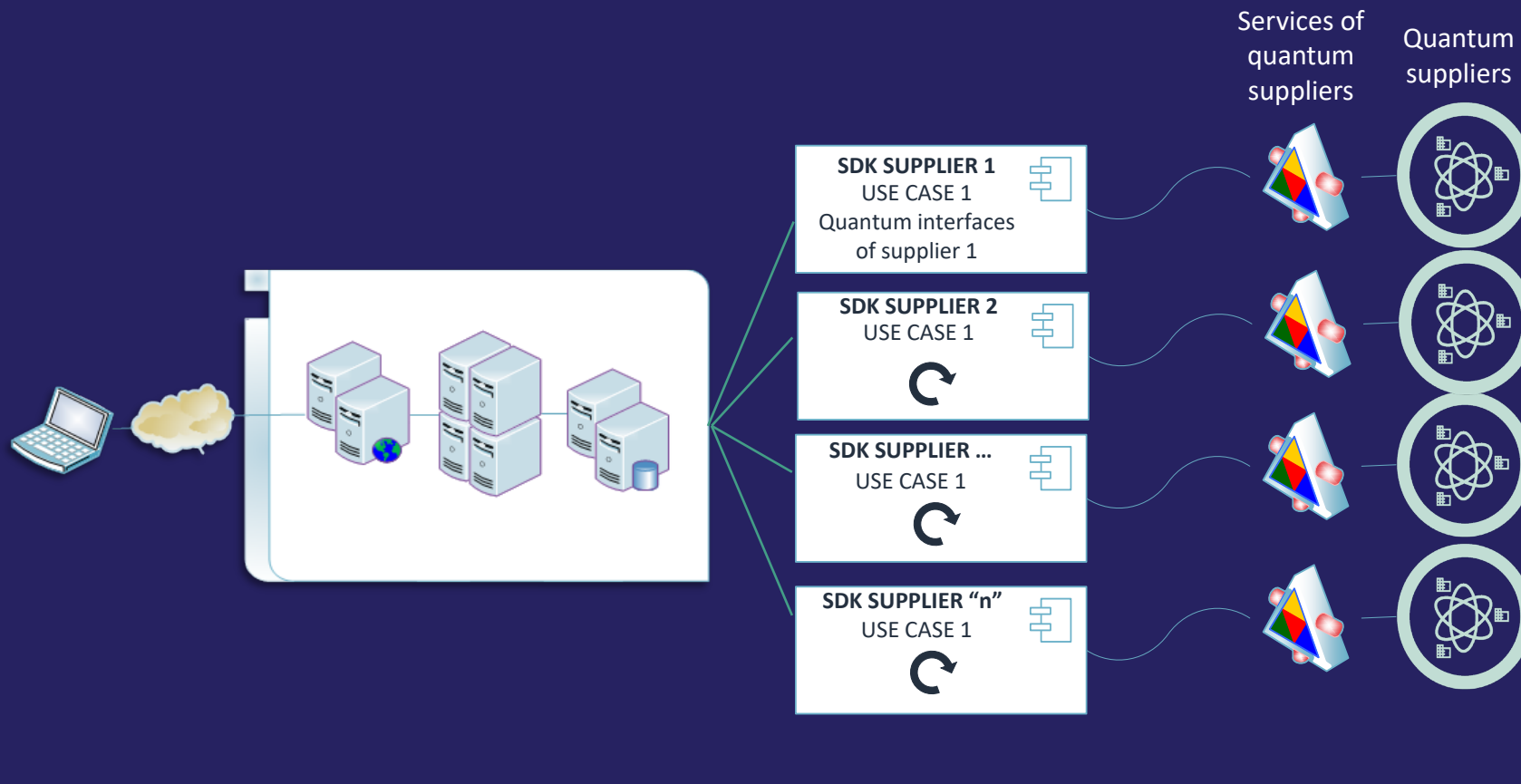


Hybrid Quantum-Classical Architectures with qSOA[®]

...and as most suppliers actually state...

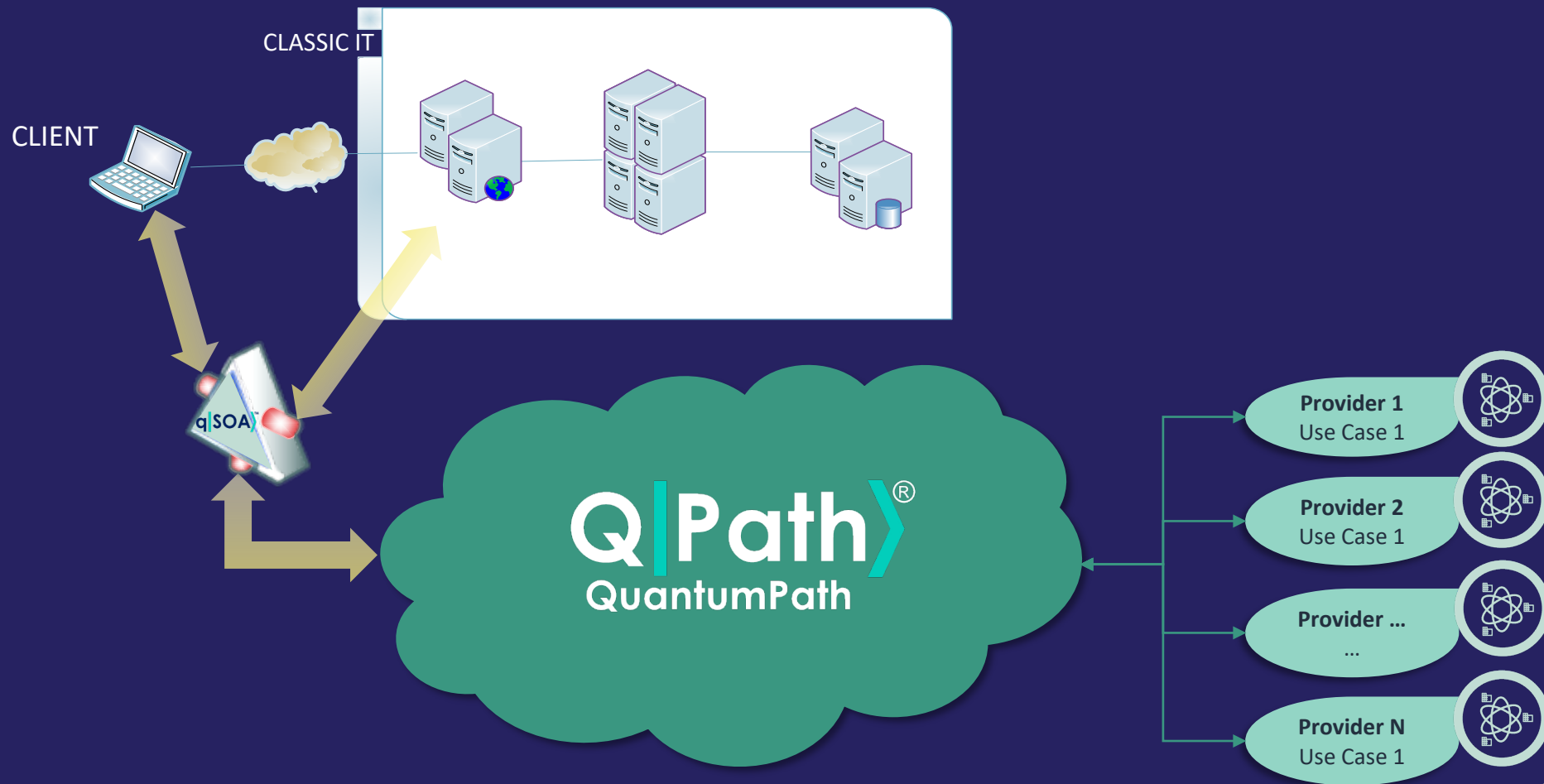
"The fine print"...

- For each use case, one code component
- For each technology, a version of the code component is required
- Each component is specific to a manufacturer's SDK
- Each manufacturer has its requirements and specifications



Hybrid Quantum-Classical Architectures with qSOA[®]

...and how it is approached with the help of QuantumPath[®] qSOA[®] REST API...



Hybrid Quantum-Classical Architectures with qSOA[®]



A high-level service architecture that makes the classical part independent from the quantum part, fully oriented to business requirements.

- 1 Clear and standardized connection points
- 2 Manufacturer agnostic
- 3 Direct access to quantum business use cases
- 4 Democratize the Quantum resources reusing your timelapsed stored results

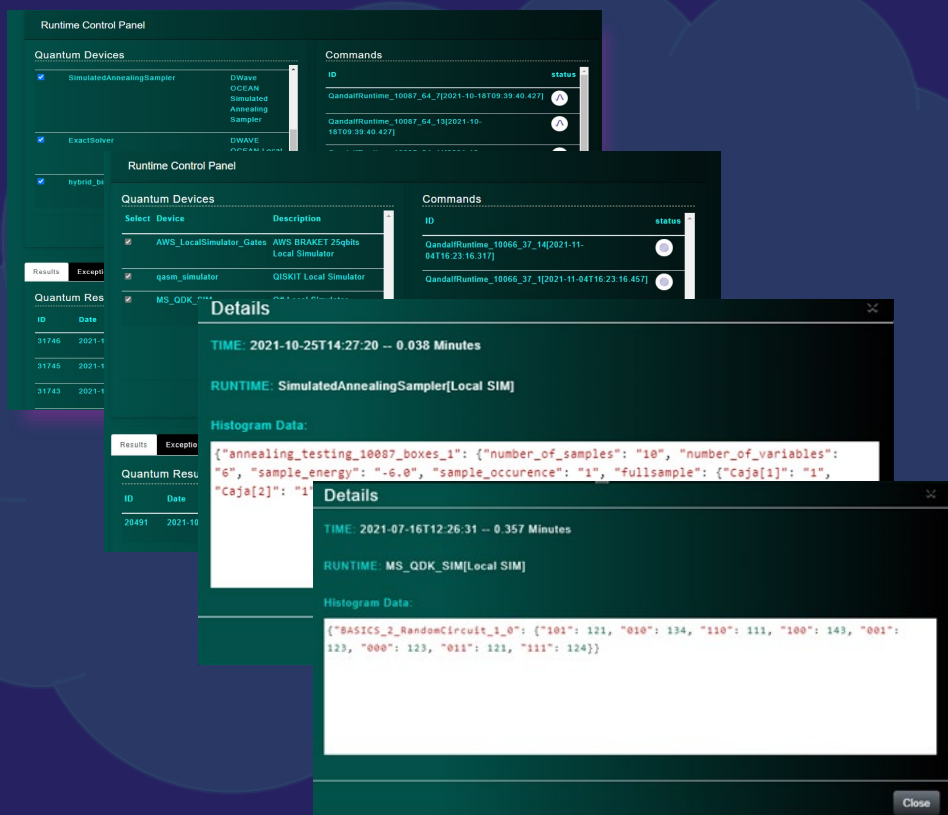
QPath[®]'s qSOA[®] architecture, metalanguages, APIs and *ConnectionPoints* simplify the development of quantum algorithms and apps in the context of hybrid information systems.

Hybrid Quantum-Classical Architectures with qSOA[®]

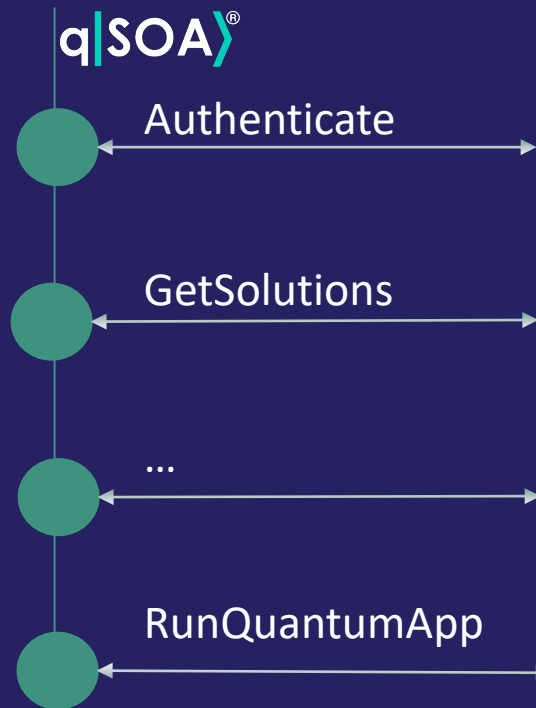


Hybrid Quantum-Classical Architectures with qSOA[®]

Run unchanged against your favorite instances on your vendors' quantum computers ...



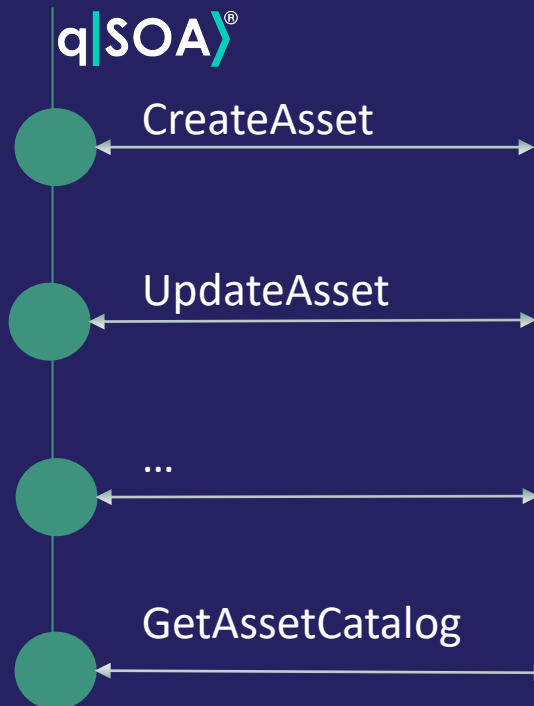
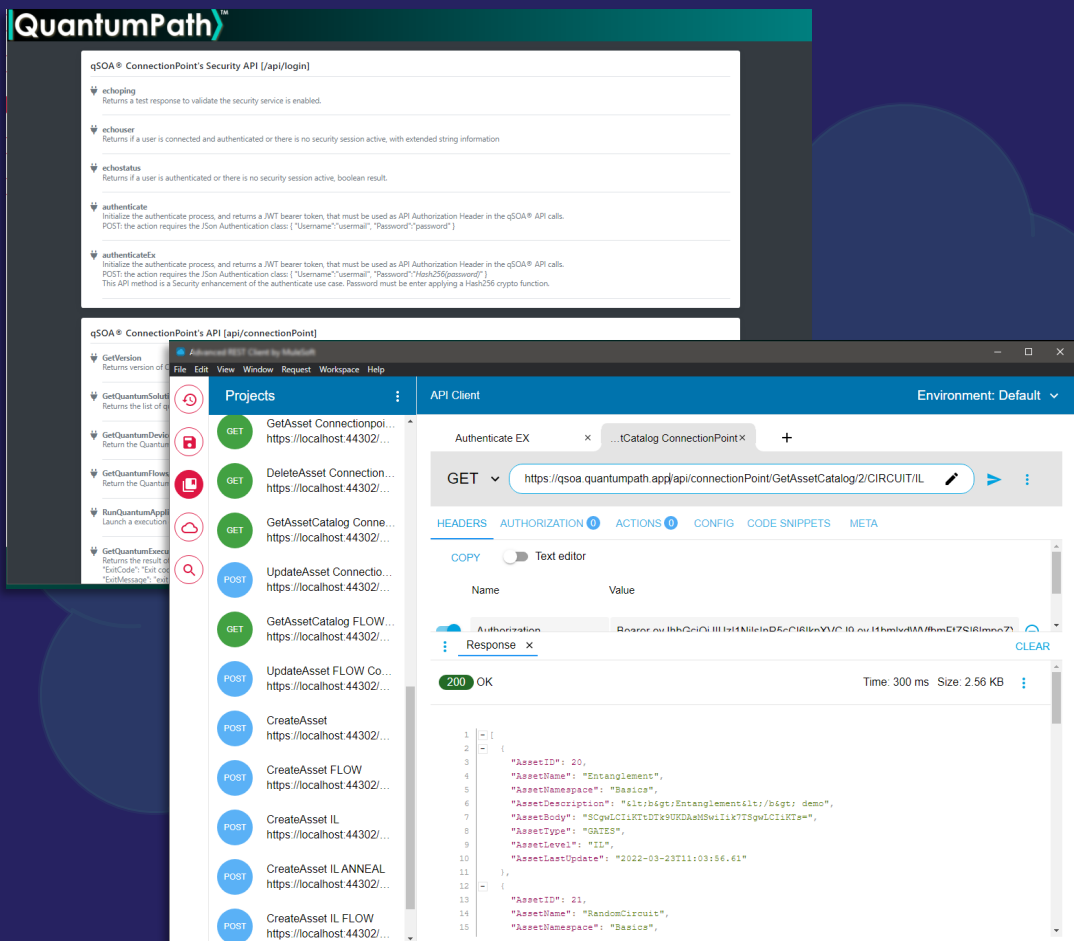
...reading standardized results



Hybrid Quantum-Classical Architectures with qSOA[®]

Dynamically create and manage the Quantum Assets Lifecycle...

... Using Visual level Language or QP Intermediate Language. Compose your “strings” ...



Hybrid Quantum-Classical Architectures with qSOA[®]

Quantum software development platform for the hybrid solution ecosystem



Hybrid Quantum-Classical Architectures with qSOA[®]



Simple Windows Application through .NET Client QPath[®] SDK



Python Jupyter client through QPath[®] PY client SDK



BUSSINES CASE: NAVISION signature key



BUSSINES CASE CRM: Technicians calendar optimization



BUSSINESS CASE: QHealth Project



CAIXA FINTECH PoC: Financial portfolio

Hands On Workshop: qSOA[®] demos



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Taking it further

- Explore the Quantum Application development
 - Connecting solutions to multiple QPU (like amazing Bracket resources)
 - Explore gate-based circuits using QuantumPath®
 - Explore the advantages of Q Assets Compositor® for annealing
 - Execute experiments in multiple QPU and analyze results and telemetry
- Analyze qSOA® benefits
 - Through .NET & Python SDK integrate quantum software into your classical IT
 - Execute your quantum uses cases or thirdy-party ones
 - Create dynamic assets based on business rules and explore them into the UI

Q&A & Wrap Up Day 2



Next Steps

Survey

<https://www.aquantum.es/workshop-amazon-qpath-form/>

Follow up

Jose L Hevia– jluis.hevia@alhambrait.com

