# Bringing Multi-Architecture Compute to IBM Power

The release of [Red Hat® OpenShift® 4.14](#) brought the OpenShift Container Platform Multi-Architecture Compute (MAC) feature to IBM Power®. Multi-Architecture Compute provides a single heterogeneous cluster, enabling fit-for-purpose computing so clients can align tasks and applications to CPU strengths and software availability rather than one architecture.

With clients having expressed interest in incorporating the feature into their solution on Power, IBM® kicked off an early adoption program to enable [SME.up](#) for Multi-Architecture Compute, obtain feedback on the usability of MAC, receive input on onboarding materials, and further validate and refine use cases. Led by the IBM Power Development and Design teams, IBM Power's Multi-Arch Cluster Early Adoption and Feedback Program allowed clients and partners to conduct a trial and provide feedback. Working with SME.up, an IBM Power partner based in Italy, the team evaluated the interest in mixing architectures and the instances in which clients sought to implement MAC on Power. SME.up has a long history of configuring and deploying solutions on IBM Power, positioning them as the perfect partner for this opportunity to enhance usability moving forward.

Getting started

Working to co-create MAC on Power, the IBM Power Development and Design teams provided SME.up with step-by-step instructions and architecture diagrams to manufacture the onboarding process. SME.up began by first setting up the MAC cluster and deploying an existing application before progressing further and successfully deploying a new application in the MAC cluster on Power.
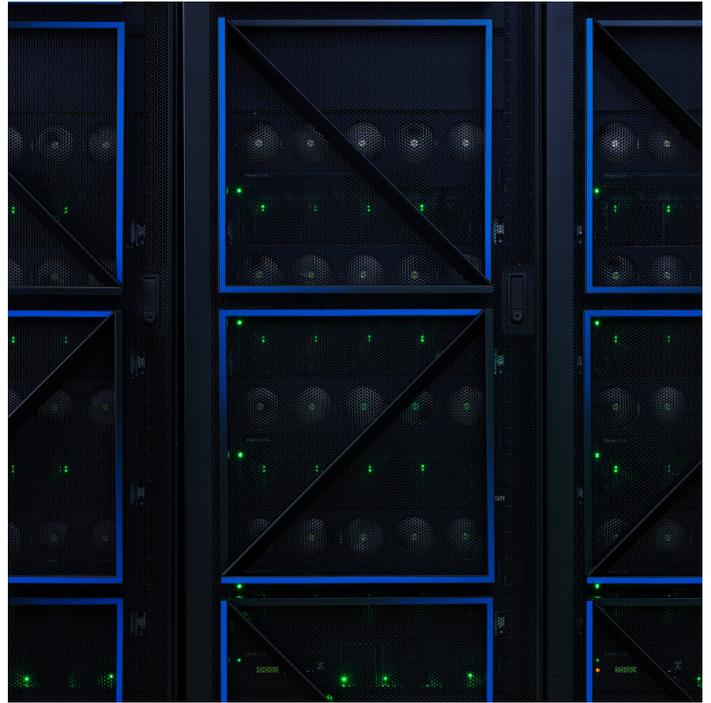
Engaging in co-creation proved to be mutually beneficial. Through the lens of the IBM teams, SME.up provided invaluable feedback, which led to a more streamlined onboarding documentation. From the partner's perspective, having early access to this solution allowed them to bypass struggles with a few x86 specific applications they required that were not available with OpenShift on Power.

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The process was fairly straightforward and easy to understand. The manual surely helped in giving us some ideas to handle deployments on MAC.

Mauro Sanfilippo
Chief Technology Officer
SME.up

Outcome

The integration of multi-architecture support underscores the Power platform's commitment to adaptability. It empowers users to harness the strengths of different architectures within a unified Red Hat OpenShift Cluster environment. This exciting feature unlocks new possibilities, providing versatility and optimization for composite solutions that span multiple architectures while helping reduce the cost and complexity.

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This groundbreaking feature empowers clients to harness their current Red Hat OpenShift cluster to facilitate the deployment of workloads on Power architecture with high availability and co-location advantages. It is financially strategic to run container workloads on Power. Having x86 and Power Worker Nodes in the same cluster simplifies migrating existing x86 applications to Power. While the cost benefits of Power are prominent, MAC allows applications only available on x86 to remain in place, catering to a client's specified needs.

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This was an excellent experience for us, and I want to thank everyone!

Mauro Sanfilippo
Chief Technology Officer
SME.up

Dive deeper

Learn how to deploy an open-source e-commerce solution using x86 and Power Worker Nodes with Red Hat OpenShift Multi-Architecture Compute.

Continue learning with the Getting Started with MAC on Power Guide →

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