Abstract: The drive toward higher density has pushed deployments from nothing shared toward PaaS cloud solutions that achieve sharing up to the OS level by leveraging lightweight containers such as LXC, Warden, and Docker. The natural next step is to leverage sharing at the runtime layer, including sharing at the Java Virtual Machine (JVM). Sharing at the JVM layer enables multiple applications (tenants) to run safely in the same JVM. This session delves into the technical challenges, what can be shared, and other issues and benefits of sharing at the JVM layer. It includes demonstrations using an existing multitenant JVM to show isolation and resource controls in action.

Speaker Bio: Michael Dawson has worked with the IBM 9 JVM team for the past nine years, implementing core JVM components. He has contributed to IBM Java deliverables over the years, including WebSphere Real Time plus Java 6 and Java 7 releases across platforms. In the last few years, he contributed to IBM cloud and virtualization efforts for Java technology. In the past, he held leadership roles in teams that developed e-commerce applications and delivered them as services, including EDI communication services, credit card processing, online auctions, and electronic invoicing.