Querying Advanced Capability

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From MQ v9.0.5 you can now display the new ADVCAP queue manager attribute to discover whether any Advanced Capabilities are enabled on your system. IBM MQ supports the following Advanced Capabilities:

- AMS (Advanced Message Security)
- XR (Telemetry)
- MFT (Managed File Transfer)
- RDQM (Replicated Data Queue Manager)
 To be able to use any of these features, you need the following entitlement:
- On distributed: IBM MQ Advanced
- On z/OS: IBM MQ Advanced for z/OS, Value Unit Edition (VUE)

From MQ v9.0.5 (and from MQ v9.0.4 on z/OS), you can display the new ADVCAP queue manager attribute to discover whether any of these capabilities have been installed on distributed, or enabled on z/OS. If you do not have entitlement for Advanced Capabilities, displaying the ADVCAP attribute will give you confidence that you have not inadvertently enabled any of them.

On z/OS, the queue manager sets ADVCAP to be ENABLED, only if the value of QMGRPROD is ADVANCEDVUE. For any other value of QMGRPROD, or if QMGRPROD is not set, the queue manager sets the value to DISABLED.

On distributed platforms, AMS, XR, MFT and RDQM are separately installable components. When you install any of them, any queue manager that uses that installation will have ADVCAP(ENABLED). If ADVCAP is enabled, it does not mean that all components are installed, but only that at least one advanced capability is installed. The list of installable components that enable ADVCAP might change in future releases. On the IBM MQ Appliance, ADVCAP is always ENABLED since it is not possible to install separate components.

As it's a queue manager attribute, you can display it using runmqsc, MQINQ or PCF. You can also query it from a JMS application by getting the boolean property CommonConstants.WMQ_CAPABILITY_ADVANCED from the MQConnectionMetaData object.

You need to be entitled to IBM MQ Advanced to use the IBM MQ Bridge to blockchain. The MQ Bridge to blockchain checks that ADVCAP is ENABLED on the queue manager it is connected to.

In conclusion, the ADVCAP queue manager attribute helps you to maintain audit compliance by enabling you to check that you are not using features that you are not entitled to.