IBM Z Practitioners

Companies that run an IBM Z® mainframe are typically banks, insurance companies, and large retail companies. Although many more industries use the IBM Z platform, the previously mentioned industries have two thing in common: a large number of end users and a need to process large amounts of data. To create end-user accessibility, applications need to run effectively, be up to date, and run without errors or interruptions. There are many kinds of personas needed to operate and support the system, but who are they?

SYSTEM PROGRAMMERS

*Let's first look at the **system programmers.***

The primary responsibility of system programmers is to maintain the operating system. They are responsible for installing the operating system and ensuring that all updates and fixes for the system are kept at the right level. System programmers are also responsible for upgrading and maintaining all programs and software running on the operating system. They provide database maintenance, update custom applications or work with software that the application runs on called an application server. They're responsible for working with a broader team to debug software if an error is to occur by analyzing output on the operating system, known as system logs.

APPLICATION DEVELOPERS

*When we look at the level of the application software, we have the **application developers.***

Application developers are responsible for designing, building, testing, and delivering the application needed by the organization. By gathering the requirements from their customers and business analysts, application developers write code in their chosen programming language to create the application. During the development phase, the application will go through a series of steps like compiling, debugging and testing. Application developers are also responsible for maintaining and enhancing existing applications used by the company.

SYSTEM ADMINISTRATORS

*In some organizations, we can find **system administrators.***

System administrators' role can look similar to system programmers' roles, but system administrators are more focused on the day-to-day tasks as well as focusing on the application layer instead of the underlying software utilized by the application. The tasks of system administrators include checking the status of batch operations, which is a long-running application, output control and performing health checks on the applications in use. Performing health checks on the applications in use is like checking the performance of the software on your phone or laptop. They could be checking to see how much memory is being used or if the application is using more of the processor than expected. System administrators also work closely with the security aspect of the environment. Another task performed by system administrators is maintaining access to resources and access lists, which control access to files and directories, to make sure only authorized people can access the proper information and assets on the system.

SYSTEM OPERATOR

*When we look at controlling the applications and monitoring the statuses, we find **system operators.***

In complex environments, there's a large amount of data processed by many jobs. System operators are responsible for monitoring and controlling the jobs and applications.

System operators are responsible for detecting errors and unusual behavior by starting and stopping jobs and monitoring the system consoles. They're in close contact with the system administrators to assure a smooth-running environment. In some organizations, system operators are responsible for keeping an eye on many different systems simultaneously. Sometimes, system operators might work changing hours throughout the day so that someone is always keeping an eye on the running systems.

IN SUMMARY

The tasks just listed differ from organization to organization depending on the needs, size, and so on. For example, organizations that include IBM Z mainframes as part of their *hybrid cloud* environment may need more roles to serve their organization. In this case, the roles of these personas may differ slightly.

The IBM Z mainframe computer is a powerful tool for enterprises and organizations who all have a common need: access to a top-of-the-line system for their mission-critical information. We reviewed the various roles that play into ensuring this system is running smoothly and properly. It takes a team, but when it comes to protecting ever-important information for influential organizations, it's worth the effort.