

AUTOMATED APPLICATION DEPLOYMENT

ABSTRACT

In one embodiment, a computer-implemented method comprises using a script automation processor that is hosted using a virtual compute instance and a virtual storage instance associated with one or more second non-transitory computer-readable storage media storing one or more second sequences of instructions defining an API implementation of the API, a graph server, and one or more programming language runtime interpreters, receiving a user pipeline automation script comprising one or more first sequences of instructions specifying one or more API calls to an application programming interface (API), and a user application; using the script automation processor, creating and storing one or more programmatic containers in memory of the script automation processor, the containers corresponding to functions that user pipeline automation script and user application invoke; using the script automation processor, creating and storing a directed acyclic graph (DAG) in the memory of the script processor, the DAG comprising nodes and edges corresponding to dependencies of the containers; using the script automation processor, interpreting the user pipeline automation script using a particular programming language runtime interpreter among the one or more programming language runtime interpreters; using the script automation processor, running the user pipeline automation script to automatically build, test, or deploy the user application in a cloud computing service.

[FIG. 1]