

# Virginia Commonwealth University Service Catalog

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Project Number CS 25-329

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We are interested in providing convenient access to advanced computing resources. These computing resources are in high demand by researchers, teachers, and industry professionals, whose research interests and needs vary drastically between individuals. Consider a hypothetical instructor teaching a class on Natural Language Processing (NLP). The instructor would like to create NLP servers for their students so they can engage with a shared demo and follow along on their own computers. However, creating an NLP server for each student is a time-consuming and highly nontrivial task. This is where the Service Catalog comes in. The instructor can consult the Service Catalog, select the desired NLP server, modify it to their needs, then make the server available for their students within minutes. This makes the complex task of creating a server nontechnical and practical. We have identified common types of servers people might use and created a master image for each server, which can be deployed and activated with a single click. Our solution uses a cloud infrastructure provided by Amazon Web Services (AWS) and Ansible to automate the provisioning of each server.

Keywords: Cloud Computing, Ansible, Provisioning, Customization

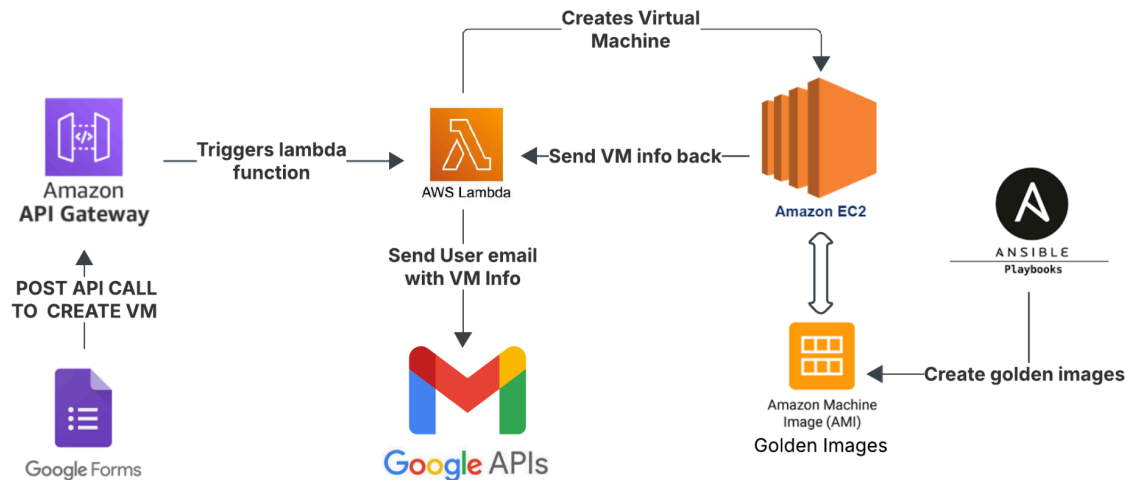


Figure – The backend process of creating the golden image.