

Spark Cloud Studio MVP Project - [Custom Projects] Virtual Studio Platform

Stakeholders

Cloud303
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Business Justification

The Customer wants to provide powerful, remote graphics workstations fully loaded with software to their clients on-demand. Their goal is to provide affordable access to a powerful workstation anywhere in the world.

Overview

The focus of this project is to develop a minimal viable product (MVP)* that Spark Cloud Studio will be able to use to commercially launch the product.

The Spark Cloud Studio product is intended to provide:

- Powerful, remote graphics workstations, preloaded with with 3rd party applications, to users around the world with a large percentage of its clients expected to reside in Southeast Asia
- A "transparent" file management solution for moving files between a local workstation and the remote workstation
- A user desktop solution for configuring and initiating their remote workstation sessions
- A resource manager to launching, managing, and tearing down the remote workstations
- . A marketing website to attract potential clients
- Support for client registration, account creation and user management
- A component that supports client invoicing and billing

^{*} A minimum viable product(MVP) is the release of a new product (or a major new feature) that is used to validate customer needs



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and demands prior to developing a more fully featured product. To reduce development time and effort, an MVP includes only the minimum capabilities required to be a viable customer solution.

Success Criteria

A successful MVP launch will provide solutions that address the intended purpose described in the overview section above.

In addition, the customer desires that the product will

- Allow a remote workstation to be accessed from anywhere in the world, even over low bandwidth data connections (e.g.4G networks)
- Support a workgroup concept where groups can collaborate on common projects
- Provides the same user experience when connected or working offline. There should feel as if there is no boundary between the local machine, and the remote workstations.
- Support remote workstations launches with a single mouse click and have the remote workstationready for use in under 10 seconds
- Provide the ability for new accounts to be created and configured in less than five minutes
- Provide the ability to reconfigure a remote workstation on-the-fly without having the shutdown and restart
- Be low cost. Under \$2.50/hour usage fees. Under \$6.00/month for 50 GB storage
- Meet all MPAA standards for datasecurity

Assumptions

The purpose of this project is to develop a MVP which will be used

- To discover additional needs and requirements
- As a foundation for subsequent product development
- To begin generating revenue

The application is to be hosted on AWS. The Spark Cloud Studio platform will be developed as a multitenant solution (multiple user profiles sharing one AWS account).

The client has a working prototype of the remote workstation which can be used as a starting point for this activity. Client will be responsible for identifying additional tools (or changes to the tools used) to



those used in the prototype (i.e. an asset management tool for managing projects and project assets). Selection of tools must be made before design of that part of the system begins or else the schedule (and possible resource allocation) will be affected. It is recommended that the client consider the integration cost and impact of a tool on the development of the system.

The timing and cost constraints, as defined in the success criteria section, are representative of the customer's stated desires for the product. Costs are defined by AWS and Cloud303 has no ability to impact or change those costs. Cloud303 will make every effort to optimize the platform to achieve the state success criteria.

Cloud303's standard rates for offsetting AWS funding is \$500 / hour. Approved vendor rates will be separately stated on the applicable Word Order for each individual phase.

Cloud303 reserves the right to subcontract out work to a third party. Spark Cloud Studio has previously approved Cloud303 using Maruti Technologies as an approved supplier. All direction for work to be done by Maruti Technologies, or any other third party, must go through Cloud303 in order to the terms of this contract to remain in effect.

Technical Approach

This project will use a phased development approach to build the product. Each phase will introduce a new layer of functionality to the system. Each successive phase will address what is seen as the next highest priority of the remaining tasks. At this time, the planned order of development is:

Phase 1

Project planning and design (workflow and dataflow identification / user experience and user interface design / basic architecture definition)

- Replicate POC system on a secure AWS infrastructure following best practices for account setup, security, and disaster recovery
- Integrate a file sharing system (central storage, remote workstation, local workstation)
- Development of progress web app for configuring, reconfiguring and launching the remote workstations (iOS, Windows)

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- Phase 2
 - Account registration / creation. Marketing website. Billing support
 - Multi-region performance and cost optimization
- Phase 3
 - Renderer Farm support
 - Technical debt
 - Pre-launch optimization

The plan is to have a working system after each development phase. Features will be developed and demonstrated working in a single region before expanding to the needed multiple region concept to avoid adding unnecessary complexity during initial development.

High Level Architectural Concept

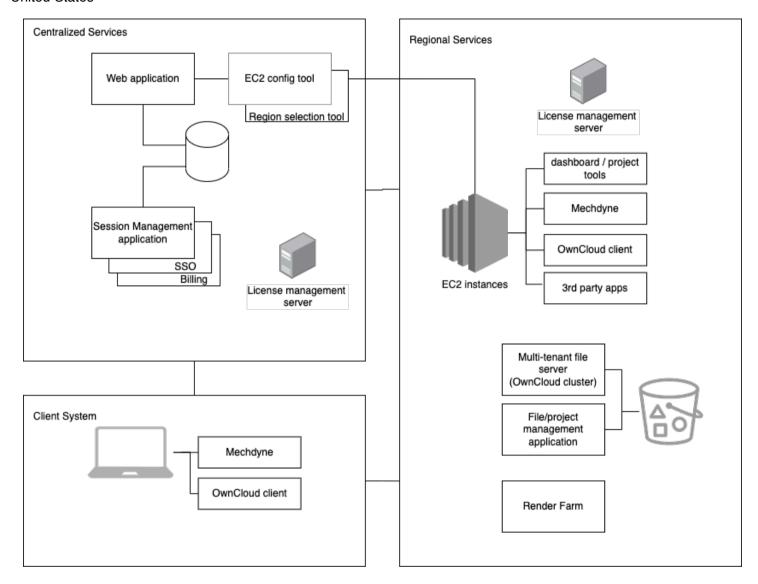


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Order # S03328 - Spark Cloud Studio[CustomProjects] Virtual Studio Platform

Your Reference:		Salesperson:		
Virtual StudioPlatform	Tucker Holden			
Description	Quantity	Unit Price	Taxes	Amount
Custom Application Development - Visual Studio Platform MVP	2,285.00 Units	350.00		\$799,750.00
AWSFunding	1.00 Units	-399,875.00		\$-399,875.00
		Subtotal		\$399,875.00
		Total		\$399,875.00



Client Responsibilities

Responsibility	Description
Pay - AWS- Hosting Fees	The customer is responsible for paying for AWS usage and resources running in the account for the project while Cloud303 and/or the client's team tests, deploys, or executes on SOW items. This includes new accounts deployed in Cloud303's resale organization to fulfill SOW items. The creation of new accounts will incur hosting fees, as well as any applicable fees for usage of resources deployed in the account. The client is responsible for ongoing fees for any accounts deployed, for as long as the account is active. Any account termination requests must be made in writing to Cloud303. Any invoices outstanding at the time of termination will be the responsibility of the customer. Non-payment of any fees incurred on Cloud303-hosted accounts can result in termination of the account at Cloud303's discretion in accordance with the Master Service Agreement.
Final Testing	Upon notification of the completion of the workload stated above, the client will have 7 business days to test and confirm the expected features and functionality are present.
Custom Task	Load Balancer



Terms and Conditions

AWS FUNDING

All mentions of any AWSFunding/AWSCredits listed in this SOW are determined by and at the sole decision of AWS. As Cloud303 does not have any power or control to issue such AWS Funding/AWSCredits, the client herein agrees and understands that any AWSFunding/AWSCredits shown above may or may not be received by the client and agrees that the client will not hold Cloud303 liable in any way should the client not receive any such AWSFunding/AWSCredits listed in this SOW.

It is the expectation of AWS that any funds provided by them will be matched dollar for dollar by Spark Cloud Studio. Cloud303is willing to apply the funds provided by AWS first to cover development expenses. Costs in excess of the AWS funding will be the customer's responsibility to cover.

Signature

Walt Jones