JumpCloud #1

Browser-based ssh

Client

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Company Background

JumpCloud is a venture-funded company located in Boulder. Founded in 2012 we now have seven engineers working in Go and Node.js backed with MongoDB in an Amazon-based environment. Our offerings are centered around server management, security, and authentication controlling who can get onto a machine and allowing administrators to manage the servers with complex orchestration, as well as managing the security posture of the system.

More information is available at http://www.jumpcloud.com.

Project Goals

One of the benefits of JumpCloud is controlling access to Unix and Windows resources.

Currently our solution will authenticate and authorize to remote machines, but it requires customers to use their own RDP or SSH client.

We would like to additionally make it possible to seamless access the resources directly from their browser, similar to how the Google Compute Engine gives direct logon to virtual machines that they create.

Specifically we need to:

- * Implement a mechanism for browser-based login via SSH
- * Enhance the JumpCloud user portal to provide this access.
- * Potentially configure the remote machine in real-time to accept inbound requests from a specific IP.

Project Skills

- * Basic programming knowledge.
- * Ability to work with REST-based APIs
- * Potentially integrating with an existing browser plugin, or creating a new plugin
- * Perseverance and a desire to *research* topics with lots of unknowns. This project may require more reading of documentation and "spiking" (creating small test programs to explore) than straight coding.

Team Size and Location

Ideal team size is 3-4 people. Location is flexible.