

[QEMU/KVM VM migration test between U.S. and Japan sites]

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Abstract

QEMU/KVM VM migration is a very important function when we envision the near future where the all components are virtualized and are targeted for migration from/to anywhere. In the hope of having our KVM-based IaaS site in the U.S. in near future, we'd like to test the KVM migration between U.S. and Japan sites. We will measure the time taken to migrate the various type of VMs over the available different paths (to Japan). The type of VMs will vary in memory size and storage size, and live migration and off-line (shutdown) migration will be tested.

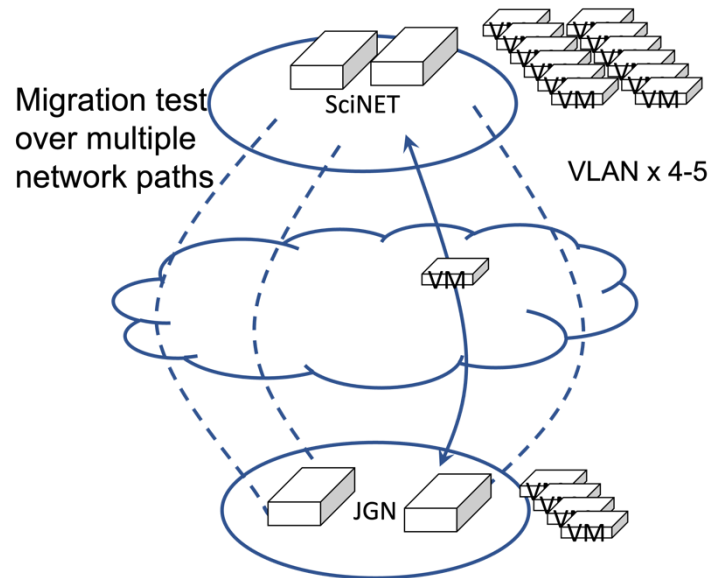
Goals

We will conduct VM migration and measure time. Additionally we will search for issues with unmanned operation in mind.

1. Conduct migration of VMs with large/small memory, and large/small storage, on an international path to Japan.
2. Search for correlation between network path characteristics.
3. Search for possible issues in the unmanned operation.

Resources

Known needs include Wide-Area network connections, location (housing, like rack-space) for two 1U servers including 100V power sources, management connections for out-of-band management.



The experiment is backed by the support and coordination of the JGN/APAN network operators. The necessary VLANs and facility (rack space, etc) should have already been voiced by the JGN operators or NICT staff.

We'd like to conduct the experiment in the Japanese daytime (i.e., U.S. night-time). We'd like remote access from Japan to control the experiment.

Involved Parties

The experiment is supported by, and the contact information are, the following institutions, researchers, and entities.

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