

SlipStream™ Integration with StratusLab

SlipStream deploys test environments in a cloud automatically, on-demand, and releases the resources after use. SlipStream users do not have to worry about configuring complex hardware and software to create personal test environments, representative of production conditions.

SlipStream has used Amazon EC2 for cloud resources, but has now been integrated with the StratusLab cloud. This allows SlipStream and the cloud resources to be deployed on entirely private infrastructures.

How does it work?

SlipStream is accessed via a secure Web 2.0 application. Users can organize their work in project hierarchies. Each SlipStream artifact is version controlled, providing complete history of changes. Two main workflows are available in SlipStream:

1. virtual machine (and disk) creation;
 2. deployment and service synchronization.
- The first flow allows a user to specify the content of each virtual machine. The second flow includes the synchronization between inter-dependent software components.

"SlipStream is to software what the robotic assembly line is to manufacturing"

Virtual Machine Creation

Virtual machines are created starting from an existing trusted reference machine image, typically only running a vanilla operating system (e.g. Ubuntu, CentOS, SuSE). The user then specifies the packages to be installed and any scripts required to complete the installation and configuration of the software on the machine. The new machine is then saved and ready to use in a deployment.

Service Orchestration

Most multi-tier software systems are composed of inter-dependent software components (e.g. clients, services, load-balancers, data stores). The user captures these dependencies using SlipStream's intuitive web interface, by declaring input and output parameters, in other words synchronization requirements. Users can then compose a 'deployment' where machine images are selected and input/output parameters connected. Our model is such that machines can be reused across different deployments.

Hybrid Cloud Solutions

SlipStream is already ready for multi-cloud usage, which is an important use-case for the second year of StratusLab. This means that users will be able to leverage their virtual machine creation recipes, as well as their deployment models, across different clouds. This feature also gives site administrators the possibility to re-generate virtual machines for different cloud services, on-the-fly.

Public and Private Solutions

SlipStream has up to now used Amazon EC2, the market leader in public Infrastructure as a Service (IaaS), as cloud provider. Now with StratusLab available for production usage, SlipStream can be deployed on private infrastructures. This means that you can leverage your existing infrastructure and use SlipStream in a wider range of software development, including ones requiring the privacy of private clouds. The integration is such that only a few parameters have to be configured to leverage the StratusLab IaaS cloud service. Image creation as well as deployments share the exact same interfaces as for Amazon EC2. This means that the exact same machine image creation recipe and deployment model can be used across

"Declare war on pre-release stress. Release often and under your own terms. Improve software quality. Reduce time-to-market. These are a few reasons why we hope you'll enjoy using SlipStream!"