**SALSA Features**

|  |  |  |
| --- | --- | --- |
| **Main Features** | **Description** | **How to prove** |
| Automate the multi-cloud resource provisioning | SALSA can connect to different cloud systems to manage VM provisioning. | We show the time for provision a number of VMs over times, on multiple clouds.  Show one application can be deployed on 2 clouds. |
| Multiple stacks deployment | The configuration of infrastructure, containers and applications stacks are separated, support fine-grained configuration. | Compare between deploying and configuring whole stacks and fine-grained configuration. Number of configuration actions? Time? Package downloaded? Repeat actions? |
| Runtime configuration on multiple stacks | The configuration capabilities of stacks and service units are exposed to SALSA API to invoke at runtime. | Show the multiple stacks deployment reduces the number of cloud resources provision. Number of code vs number of capabilities.  Compare the time for orchestrate fined-grain stacks configuration with single image configuration. |
| Wire configurations of service units | Support two service units to share parameters during their configurations. | Show how SALSA can wire a new service with existing services. |
| Centralized orchestrating the configurations | Single salsa-engine stay for coordinating the configurations, sharing parameters and exposing capabilities. | Show the time of configuring large numbers of services in parallel. Time for orchestration and actual configuration. |
| Manage configuration dependencies | One configuration can trigger other configurations. | Show a graph of configuration dependencies. |
| Configuration states report | The configuration progress is reported via states and the result as done or error. | Show the of error state summary of some deployment. |

|  |  |  |
| --- | --- | --- |
| **Implementation Features** | **Description** | **Limitation and TODO** |
| TOSCA parsing | Use TOSCA for describing | Show the input/output TOSCA |
| Network topology independency | There is no need the connection opened for the salsa-pioneer because it connects to salsa-engine to share info, get command queue, etc. E.g. components in private network or inside docker container can be configured. | Show the network topology of VM, docker, private cloud where application is configured |
| Support docker configuration | Developer can provide custom Dockerfile or request for default docker container. Software stacks then can deploy on top of this. | Show the time to preconfigure and deploy multiple docker containers. |
| Support default war artifact and Tomcat | Developer can define a war file and SALSA automatic configure Tomcat (by having in SALSA knowledge) | - |
| GUI and RESTful services | Show the configuration states and service topology, expose API as cloud service structure. | Show the deployment topology |
| Integrate with rSYBL | SALSA expose APIs that is specific for SYBL and scale-in, scale-out capability | - |