

Item 106

**git\_comments:**

1. 120s is the minimal timeout

**git\_commits:**

1. **summary:** CLOUDSTACK-6047: Make aggregation command timeout configurable  
**message:** CLOUDSTACK-6047: Make aggregation command timeout configurable In case some environments has different performance or we found some commands would took too long to execute, one global configuration item is introduced to specify "time out in seconds per one command in aggregation commands". By default it's 3 seconds. If admin feel it's too long, it can be adjust to as low as 1 seconds, which runs still well in my machine. Conflicts: setup/db/db/schema-430to440.sql  
**label:** code-design

**github\_issues:**

**github\_issues\_comments:**

**github\_pulls:**

**github\_pulls\_comments:**

**github\_pulls\_reviews:**

**jira\_issues:**

1. **summary:** Make Virtual Router to aggregate execution of commands  
**description:** Currently VR has an scalability issue during the large deployment. Everytime when VR need to be re-create or reboot, CloudStack would send lots of programming commands to it. VR would treat them as individual commands then execute them. In large deployment, it would take tens of minutes or even hours to complete all the necessary updates, like setup DHCP and programming firewall. For example, in the past, everytime we setup DHCP in VR, we need to restart dnsmasq service for every programming, which is very time consuming. Though we've introduced a way to reload without restart dnsmasq, but the same issue existed with apache2 and other services as well. And every SSH to VR would also time consuming. The new approach of reprogramming VR, would help greatly on this issue, and hopefully great reduce the VR programming time. It would introduce a mechanism to "aggregate" the commands to be executed, and do it in one batch inside VR. And restart the related services(if necessary) only after the whole batch is completed. The configuration would be transfer to VR in one piece as well, eliminate any unnecessary ssh. We would expect in such scenario, most configuration would only be text update and involve no more time consuming operations. We would leave every possible time consuming operation to the end of execution of aggregated commands.

**jira\_issues\_comments:**

1. Commit deb55acd142a9bcc81daa50256809afebc1db901 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=deb55ac> ] CLOUDSTACK-6047: Made VR scripts name to constant string
2. Commit ebf7ee40b11cf50c99d7699100ea8d98862fb6e9 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=ebf7ee4> ] CLOUDSTACK-6047: Generalize execution in VirtualRoutingResource
3. Commit 43b414416c7d25945079d0c105343d83455146f3 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=43b4144> ] CLOUDSTACK-6047: Introduce GroupedAnswer In some cases, Network Element need multiple answer in one, then introduced e.g. IpAssocAnswer, SetFirewallAnswer, etc. But in fact they are basically the same. So introduce GroupedAnswer for them.
4. Commit 8b341b0639b1947a71df29d409948eb96e238499 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=8b341b0> ] CLOUDSTACK-6047: Add generic wrapper for group answer needed commands

5. Commit 711b3083701e8b9852714e1817a022f039bf3235 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=711b308> ] CLOUDSTACK-6047: Introduce QueryCommand QueryCommand is a kind of command which request the state rather than configure. QueryCommands need to be executed immediately and cannot be aggregated.
6. Commit 3bbbd887f182443c266a43e21cf2b6918acf08f in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=3bbbd887> ] CLOUDSTACK-6047: Introduce VR resource unit test
7. Commit d429be75a72d426be5f17b36c55024cbcd3432bd in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=d429be7> ] CLOUDSTACK-6047: Fix fail to enable VPN
8. Commit ca683958d831f19b94e57c234b9bf2946a52cc16 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=ca68395> ] CLOUDSTACK-6047: Fix typo
9. Commit d429be75a72d426be5f17b36c55024cbcd3432bd in cloudstack's branch refs/heads/ui-restyle from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=d429be7> ] CLOUDSTACK-6047: Fix fail to enable VPN
10. Commit ca683958d831f19b94e57c234b9bf2946a52cc16 in cloudstack's branch refs/heads/ui-restyle from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=ca68395> ] CLOUDSTACK-6047: Fix typo
11. Commit e5304d5e822f45bd62b097e608ebd89022ae0f44 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=e5304d5> ] CLOUDSTACK-6047: VR resource testing improvements
12. Commit c0ed0b78198eef7bdf81637df3c2e2b23281adde in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=c0ed0b7> ] CLOUDSTACK-6047: Make VR LB script accept a file name Rather than default filename everytime since in aggregated commands the file would be overridden if the filename is same.
13. Commit 60dc25450a02f070c13a768d832a7a24d2b7b414 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=60dc254> ] CLOUDSTACK-6047: Introduce Aggregated commands queue to VR
14. Commit ccea5703df45ef12602421cd45510f5841ddb641 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=ccea570> ] CLOUDSTACK-6047: Add testing for VR aggregation commands
15. Commit 2de67dff423be1fd81992302ae9ec38f6d619c09 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=2de67df> ] CLOUDSTACK-6047: Fix checkstyle build issue
16. Commit 78b148d0fccdf61e1c6c103e4dfa6b80b0fe9931 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=78b148d> ] CLOUDSTACK-6047: Fix FindBugs warning
17. Commit f45de30d1b94df8bb32f9aa724521209f1ae6eb0 in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=f45de30> ] CLOUDSTACK-6047: Enable VR aggregation commands for VR start/reboot
18. Commit 467986321a602f79e63205168c58a2410caeaddc in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=4679863> ] CLOUDSTACK-6047: Enable VR aggregation commands for VPC
19. Commit 1d3a6eaa505db1023cde4844b1265ceb852abeab in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=1d3a6ea> ] CLOUDSTACK-6047: Fix timeout issue when try to execute aggregated commands Add executeInVR() with timeout interface to VirtualRouterDeployer AggregationControlCommand with Action.Finish may take longer than normal command since it would execute all the commands in one execution, and it may result in SSH timeout for SshHelper or other mechanism communicate with VR. Introduce an new executeInVR() interface with added timeout period for waiting FinishAggregationCommand to complete execution.
20. Commit d56b45a1c3ce13bdec837a8701beb936220f34ee in cloudstack's branch refs/heads/4.4 from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=d56b45a> ] CLOUDSTACK-6047: Fix timeout issue when try to execute aggregated commands Add executeInVR() with timeout interface to VirtualRouterDeployer AggregationControlCommand with Action.Finish may take longer than normal command since it would execute all the commands in one execution, and it may result in SSH timeout for SshHelper or other mechanism communicate with VR. Introduce an new executeInVR() interface with added timeout period for waiting FinishAggregationCommand to complete execution.

21. Commit 3578c7137f42fdcaadad9b263e18921e2fa094da in cloudstack's branch refs/heads/4.4 from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=3578c71> ] CLOUDSTACK-6047: Make aggregation command timeout configurable In case some environments has different performance or we found some commands would took too long to execute, one global configuration item is introduced to specify "time out in seconds per one command in aggregation commands". By default it's 3 seconds. If admin feel it's too long, it can be adjust to as low as 1 seconds, which runs still well in my machine.
22. Commit 4620c27ebf750c840b530d18fed7d8adf857e91a in cloudstack's branch refs/heads/master from [~yasker] [ <https://git-wip-us.apache.org/repos/asf?p=cloudstack.git;h=4620c27> ] CLOUDSTACK-6047: Make aggregation command timeout configurable In case some environments has different performance or we found some commands would took too long to execute, one global configuration item is introduced to specify "time out in seconds per one command in aggregation commands". By default it's 3 seconds. If admin feel it's too long, it can be adjust to as low as 1 seconds, which runs still well in my machine.  
Conflicts: setup/db/db/schema-430to440.sql