

June,

Apologies for the late response.

You are right, the device-host, device-port... are properties and not attributes.

Couple of things I need to clarify (double checked with Nazrul).

lb-config contains sub-elements (reference to cluster and server, which in turn has a health-checker sub-element) along with attributes like (response-timeout etc.,). This element (lb-config) is used to generate the loadbalancer.xml file (done with commands like export-http-lb-config and from equivalent AdminGUI screens). Now who uses loadbalancer.xml?, supposed to be by the physical load balancers. But for 9.1, we only support SJS WebServer with an installed component called software load balancer (to work with SJSAS), in future we might support more. This S/W load balancer component (Nazrul mentioned that we could call it as 'physical software loadbalancer') understands the loadbalancer.xml, parses and interprets its content.

So, you generate the loadbalancer.xml from the element lb-config. There are two ways to apply the changes of loadbalancer.xml to the physical software loadbalancer (PSLB). You could copy the generated loadbalancer.xml manually to the PSLB location. Other way is automatically transfer the bits over the wire to the PSLB, this can be achieved by establishing the secure connection from DAS to PSLB. But how do we know the coordinates of PSLB?, that's where the load-balancer element comes into picture, with the properties device-host,device-port etc.,. How frequently or when the loadbalancer.xml file is generated and transported?, that's decided by the auto-apply-enabled attribute of load-balancer element. When this attribute is set to 'true', the lb-config changes (loadbalancer.xml file) is applied whenever there is a change in the lb-config element (ex., add/delete an instance, deploy/undeploy an app etc.,).

Examples of lb-config and load-balancer elements

```
<load-balancer auto-apply-enabled="false" lb-config-name="lb-ya-ni_LB_CONFIG"
name="lb-ya-ni">
  <property name="device-host" value="localhost"/>
  <property name="device-admin-port" value="4567"/>
</load-balancer>
```

```
<lb-config https-routing="false" monitoring-enabled="false" name="lb-ya-ni_LB_CONFIG"
reload-poll-interval-in-seconds="60" response-timeout-in-seconds="60" route-cookie-
enabled="true">
  <cluster-ref lb-policy="round-robin" ref="cl-ya-ni">
    <health-checker interval-in-seconds="60" timeout-in-seconds="30" url="/"/>
  </cluster-ref>
</lb-config>
```

Please see inline for answers to your comments.

HTH
Prashanth

June.Parks@Sun.COM wrote:

> I'm a little confused by your comments about the load-balancer element.

>

> The device-host, device-port, ssl-proxy-host, ssl-proxy-port settings are properties, not attributes. (Unless they reference third-party software, they should be changed to attributes in the next release, but for now I'm doc'ing what exists.)

Clarified above, should be properties and not attributes.

>

> Does the entire load-balancer element reference the physical load balancer, or do only the properties reference the physical load balancer?

Properties identify the PSLB, lb-config content is used by PSLB for correct functioning of LB.

>

> Is there such a thing as a non-physical load balancer?

Physical Software LB is the software load-balancer. There is a physical Hardware Loadbalancer, Like F5's BIG-IP (Read my blog) or Sun's Nauticus (Sreeram Duvuru's blog), these make more sense when you mention device-host/port (No, we dont have the functionality yet to automatically apply the lb-config content to these devices, except for our PSLB).

>

> The auto-apply-enabled attribute description says, "If true, changes to the specified lb-config are automatically applied to this physical load balancer." Your comment seems to imply the opposite, that changes to the load balancer are applied to the config. Please clarify what you mean.

I am a little confused, where did I imply the opposite?

>