# EsxCli for Orchestrator



**Warning**
Alpha Code - There is no API documentation regarding ESXCLI from VMware. This was created by trial and error. You have been warned.

## Why?

There are certain configurations that can only be set with either EsxCli or Host Profiles. EsxCli seemed at the time easier to implement.

## How?

Initially I started to look at copying the Linux version of the EsxCli executable to the Orchestrator appliance. That seemed to difficult for end users to implement (with multiple configuration file and permissions changes). So I copied over the esxcli package to my Linux desktop in Phoenix. I executed:

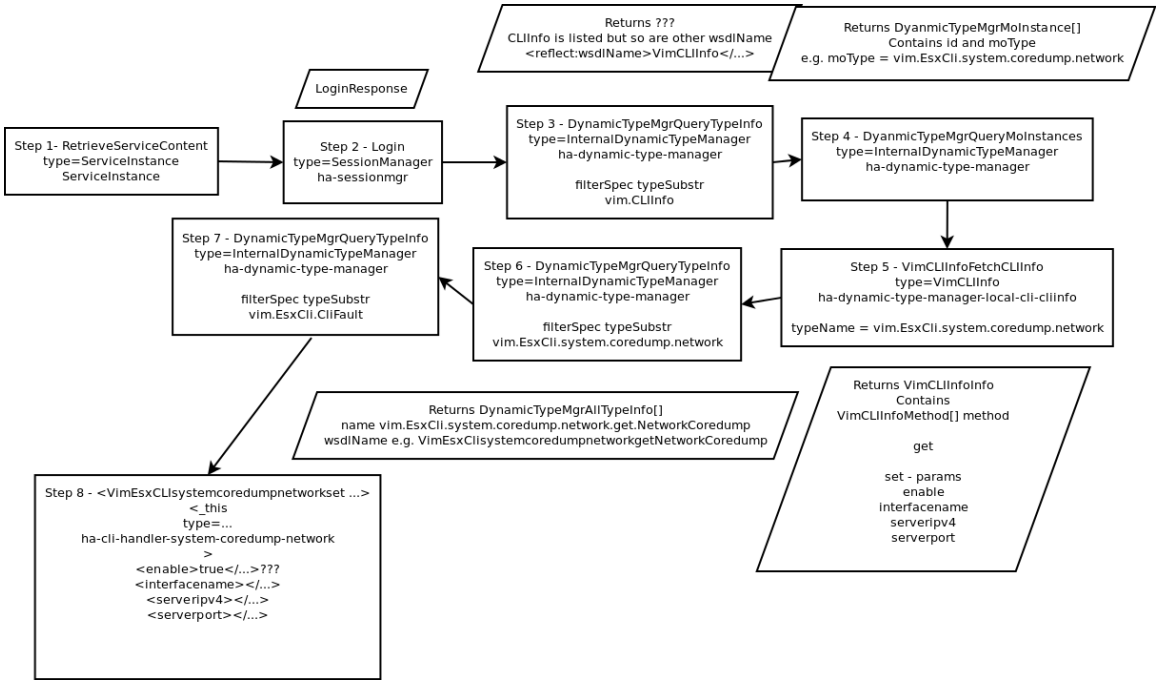
```
esxcli -s 10.0.0.19 -u root -p foopass system coredump network
```

while wireshark was monitoring the traffic. What I found to really no surprise that it was using SSL. I grabbed the private key from esx019, which is located: /etc/vmware/ssl/rui.key. Modified the configuration of wireshark to include ssl key.

```
# This file is automatically generated, DO NOT MODIFY.
"10.0.0.22","443","http","/home/foouser/keys/rui.key",""
```

On the next capture I filter for port 443 and http protocol.

The captures gave me the items that I needed. First it told me the location of the SOAP interface which ishttps://ip/sdk/webService. Second it provided the SOAP XML examples to use. Unfortunately looking at traces quickly became confusing so I created a diagram to better understand the relationships between the POST'ed SOAP XML and the returned SOAP XML.

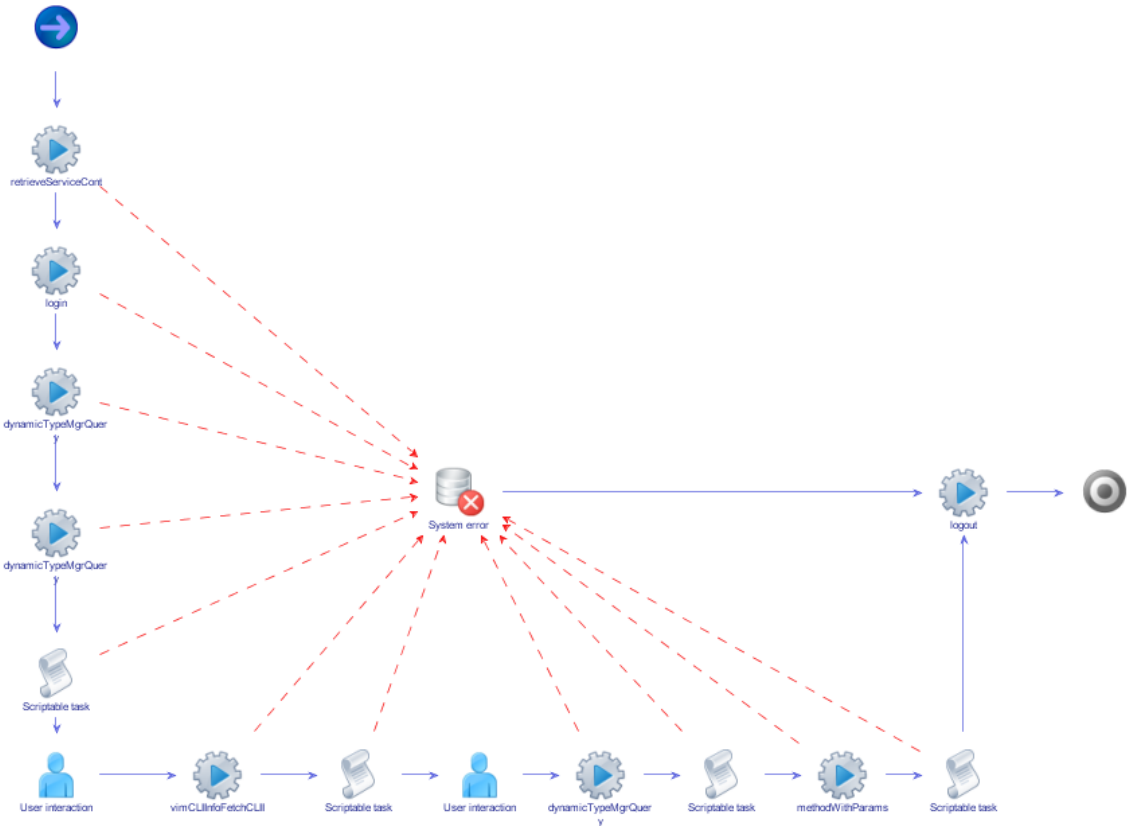



The other challenge is the WSDL is dynamic so there is no XSD to refer to. Since the WSDL definition was not available I couldn't use the SOAP plug-in so I switched to REST. My quick test worked without issue just using the XML for the traces, once that was complete I started on the dynamic actions.

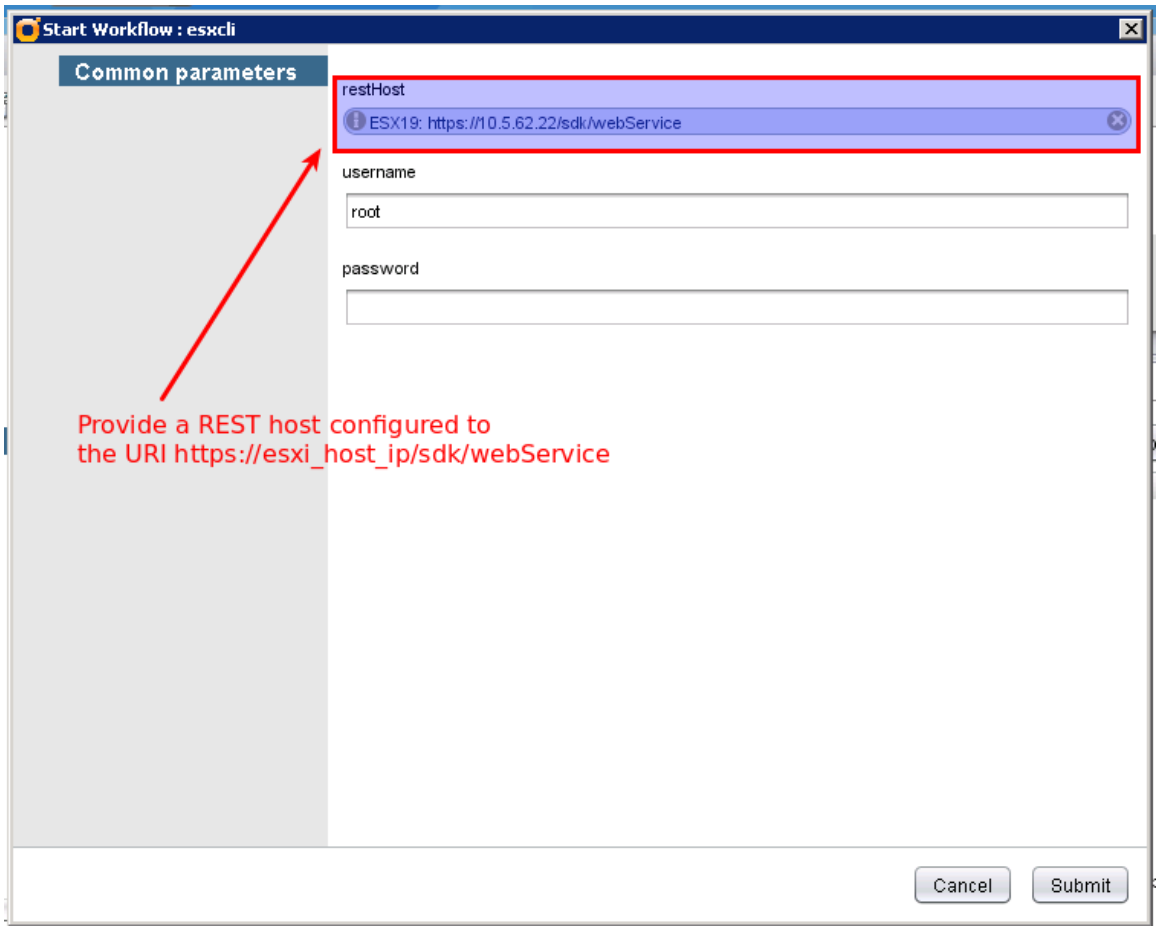
## What?

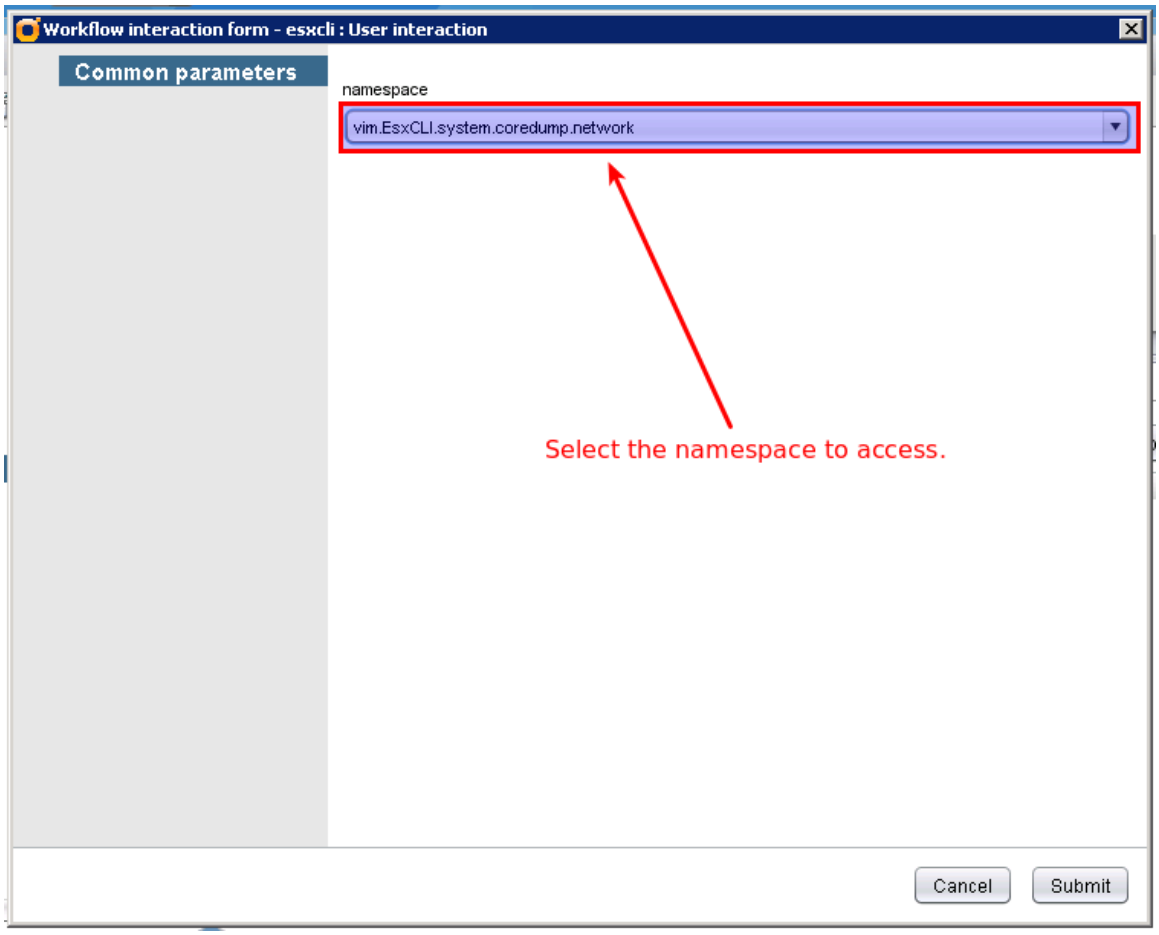
So what it can do today is providing the namespace e.g. system coredump network it will dynamically create a presentation for the required parameters and execute it on the host.

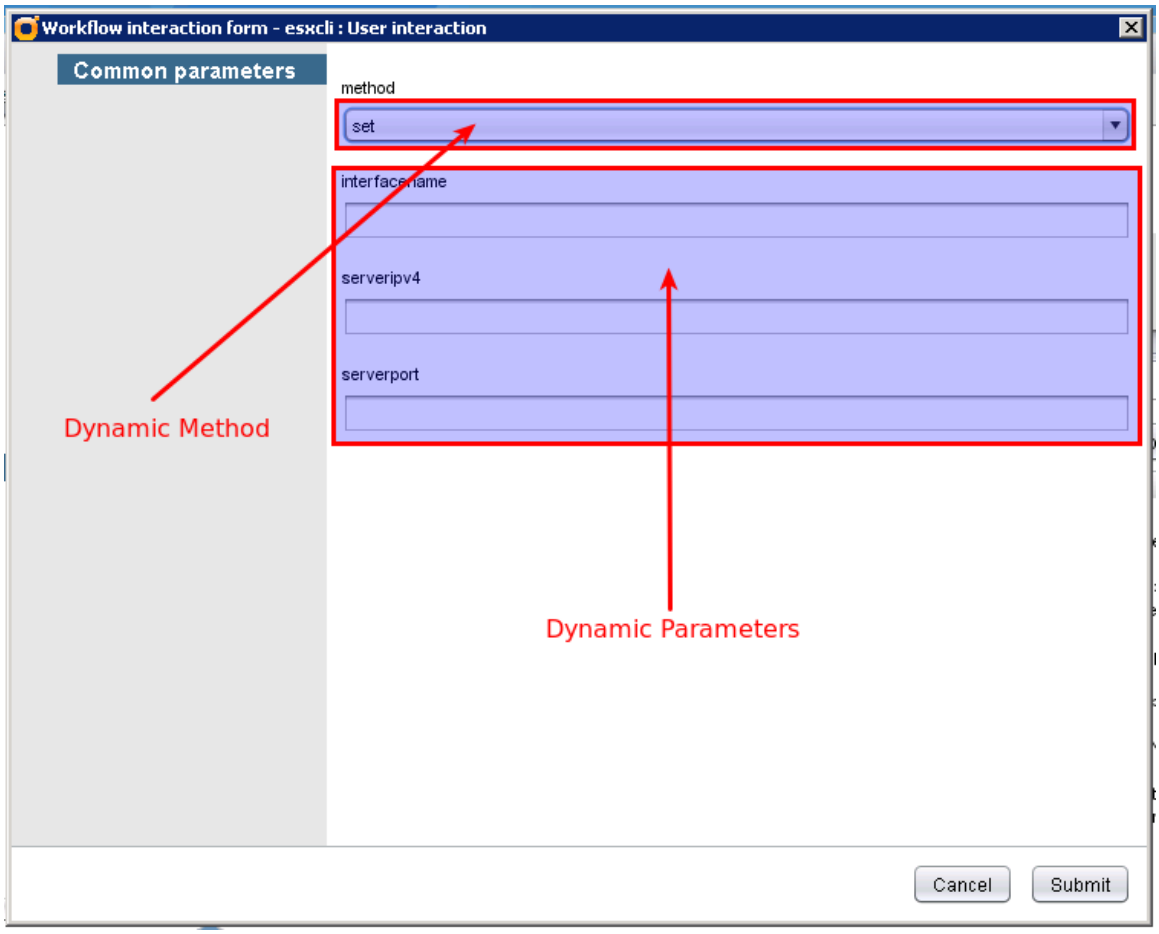
> **Warning**
> Only the system coredump network namespace using get and set has been tested.




**Screenshots**


Start Workflow : esxcli
Common parameters
restHost
ESX19: https://10.5.62.22/sdk/webService
username
root
password
Provide a REST host configured to
the URI https://esxi_host_ip/sdk/webService
Cancel
Submit


Workflow interaction form - esxcli : User interaction
Common parameters
namespace
vim.EsxCLI.system.coredump.network
Select the namespace to access.
Cancel
Submit




## References

http://communities.vmware.com/docs/DOC-11670
http://www.vcoportal.de/2011/03/xml-handling-the-e4x-way/
https://developer.mozilla.org/en-US/docs/E4X/Processing_XML_with_E4X?redirectlocale=en-US&redirectslug=Core_JavaScript_1.5_Guide%2FProcessing_XM