Supplementing LoadRunner Script for CEM

Introduction:

For enterprise architecture with clustered environment, it really becomes a challenge to define signatures for business transactions in CEM.

With the legacy approach of manually recording the transactions becomes **very time consuming** and **difficult to maintain the changes** with the next releases. So to overcome this problem, we can leverage the use of already created scripts of LoadRunner which could be imported using CEM utility and define a transaction in few steps.

Requirements:

We need the below items to generate, execute and define business transaction.

1. CEM Script Recorder Utility
2. CEM Port enabled for accepting imported script
3. LR script generated Extended Logs
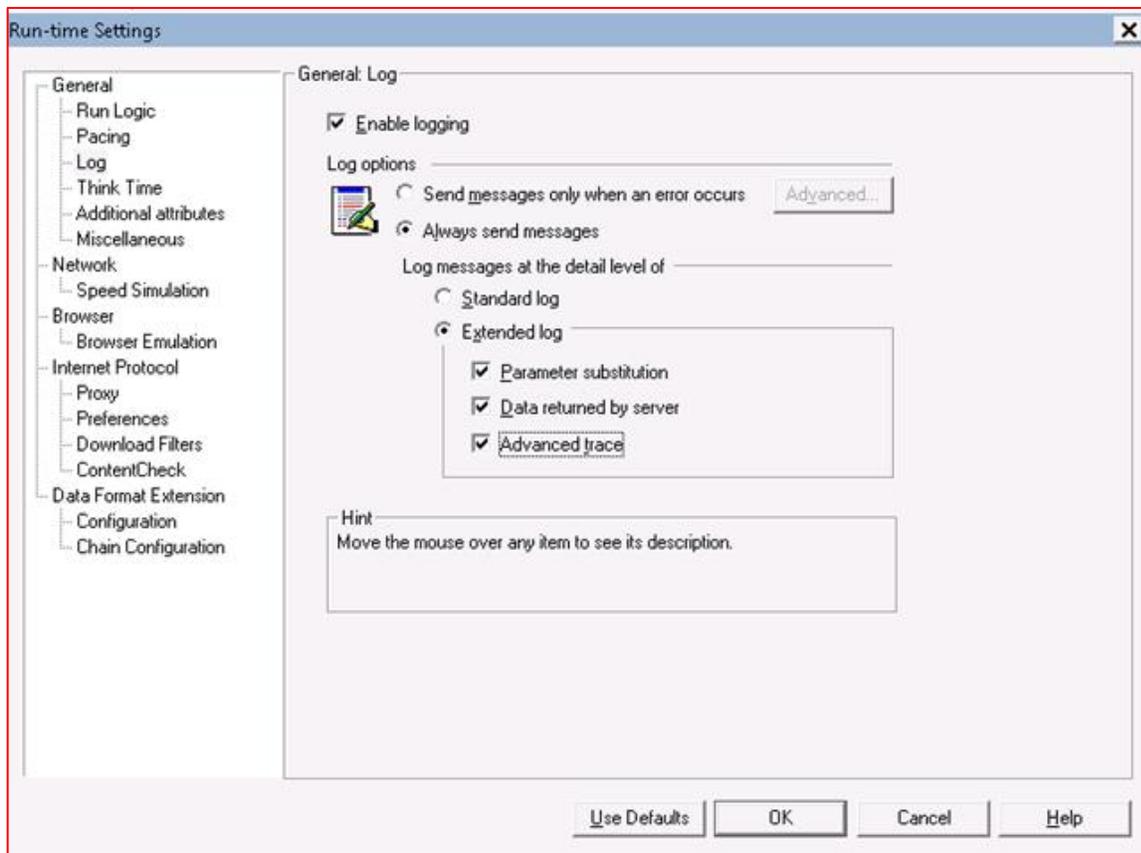
Steps in Details:

Now we will see actions in detail.

1. Install or download the '*CEM Script Recorder Utility'* from CEM console under 'Tools' tab.

   Tips: If you don't have admin right on your local system to install the utility, just unzip the installer (for say using WinZip) and you can find the executable under directory – *'...\ScriptRecorderInstall\wily\cem\scriptrecorder\bin'*

2. Generate the Extended logs from the LoadRunner script using the below steps -
   - During the Run Time settings, select the 'Extended Log – Advanced Tracer' option as in the below snapshot. You can also select others in order to get Post parameters if any.

     Tips: Though it is recommended not to enable 'Parameter Substitution' or 'Data returned by server'; but I checked with all the options and it is working.

3. In the VuGen, since script would be including components of multiple clicks, you need to pick the URL\component specific to one click.

So for e.g. below is one of the high level flow which script is executing -
Landing Page →SignOn→Searching Customer→Clicking Details Tab →Ending Session →Log Off

Now this flow consists of more than one click as well as URL's.
So to define business transaction for 'Clicking Details Tab' click, you need to know the specific URL as an identifiable component.

Below is the snapshot of the VuGen window where you can note down the line number for that particular Web URL in script. [Highlighted in Red]
So when your extended logs are generated, look for URL in the "**Action.c(Line Number)".**
Here "Action.c" depends on what you have defined in the left panel highlighted in green in below snapshot.

The above activity will help to identify components in case your application is having Dynamic URL's.

4. Once the Extended logs (in .txt format) are generated, enable the EM port 8081 by editing *em-jetty-config.xml* file.

   Tips: For clustered wily environment, this change is required at CEM Stats aggregator collector.

5. Now run the Script recorder to import the script using the below syntax :

   …\ScriptRecorderInstall\wily\cem\scriptrecorder\bin>**scriptrecorder.exe -file Directory\TraceFile.txt -server CEM_Collector:8081**

   Tips: For standalone wily installation, instead of CEM_Collector, use EM server name.

6. The above script will bring the session under 'Recording Session' Tab as shown below.

7. Now out of all components, make that URL as an "identifying" and others in "included". Further promote and follow the next steps as mentioned in CA documents.

Abbreviations:

- CEM – Customer Experience Manager
- LR – Load Runner
- EM – Enterprise Manager

Online Discussion References:

https://communities.ca.com/message/241792291#241792291

https://communities.ca.com/message/241729696#241729696

Compiler:
Vaibhav Vir Singh
APM Consultant,
Phone: +65 66548595 (O)
+65 81569861 (M)