

# LoadRunner

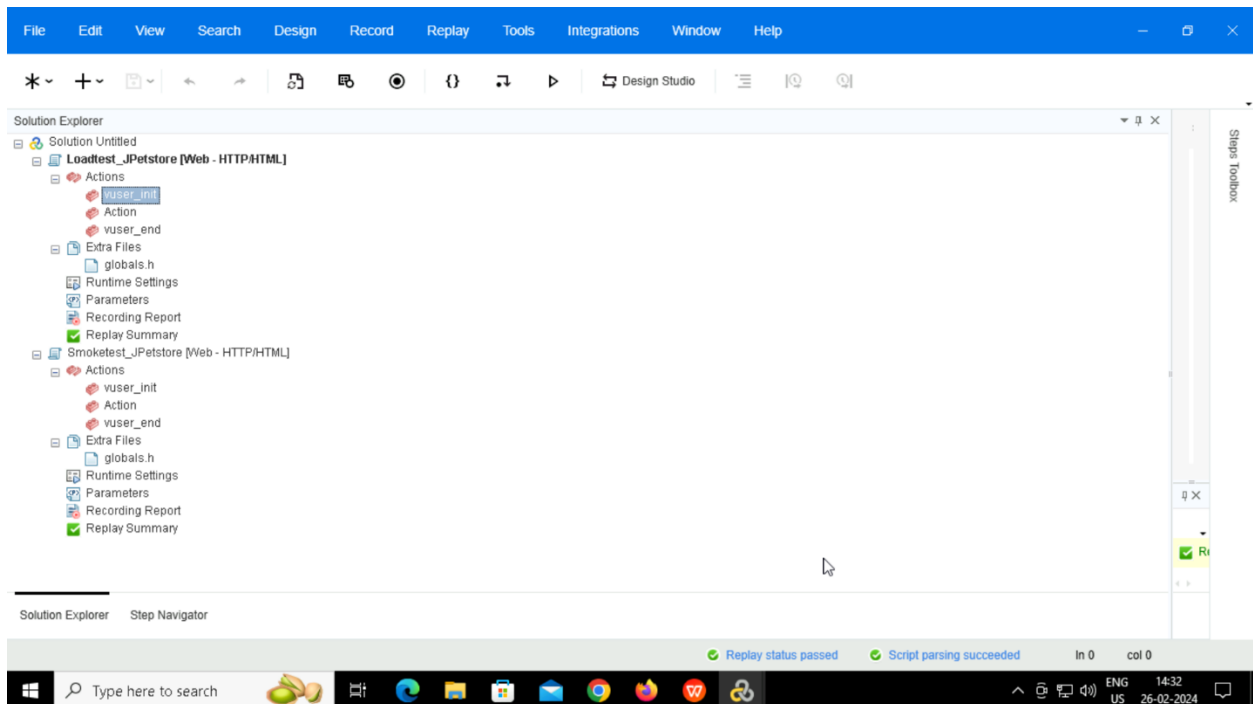
## Recording Web Application using LoadRunner

URL: <https://petstore.octoperf.com/>

## LoadRunner Virtual User Generator

Created 2 new Scripts Loadtest\_JPetstore and Smoketest\_JPetstore

And started recording the application



# Correlation

File Edit View Search Design Record Replay Tools Integrations Window Help

Solution Explorer

- Solution Untitled
  - Loadtest\_JPetstore [Web - HTTP/HTML]
    - Actions
      - vuser\_init
      - Action
      - vuser\_end
    - Extra Files
      - globals.h
    - Runtime Settings
    - Parameters
    - Recording Report
    - Replay Summary
  - Smoketest\_JPetstore [Web - HTTP/HTML]
    - Actions
      - vuser\_init
      - Action
      - vuser\_end
    - Extra Files
      - globals.h
    - Runtime Settings
    - Parameters
    - Recording Report
    - Replay Summary

Loadtest\_JPetstore : vuser\_init.c x Smoketest\_JPetstore : Replay Summ...

HP VuGenC.Global.vuser\_init vuser\_init()

```
28 lr_think_time(27);
29
30 /*Correlation comment - Do not change! Original value="26DA05FCE45FCF96D564C487238FF056" Name = "sessionId" Type
31 "ResponseBased"*/
32 web_reg_save_param_regex(
33     "ParamName=sessionId",
34     "RegEx=^SESSIONID=(.*)$",
35     SEARCH_FILTERS,
36     "Scope=Cookies",
37     "IgnoreRedirections=No",
38     "RequestUrl=/Catalog.action",
39     LAST);
40
41 web_link("Enter the Store",
42     "Text=Enter the Store",
43     "Snapshot=t2.inf",
44     LAST);
45
46 web_set_socket_option("TLS_SNI", "0");
```

Output

Replay

Replay status passed View summary Started at: 26-02-2024 14:14:09 Elapsed time: 00:00:04

Replay status passed Script parsing succeeded In 38 col 15

Type here to search

File Edit View Search Design Record Replay Tools Integrations Window Help

Solution Explorer

- Solution Untitled
  - Loadtest\_JPetstore [Web - HTTP/HTML]
    - Actions
      - vuser\_init
      - Action
      - vuser\_end
    - Extra Files
      - globals.h
    - Runtime Settings
    - Parameters
    - Recording Report
    - Replay Summary
  - Smoketest\_JPetstore [Web - HTTP/HTML]
    - Actions
      - vuser\_init
      - Action
      - vuser\_end
    - Extra Files
      - globals.h
    - Runtime Settings
    - Parameters
    - Recording Report
    - Replay Summary

Loadtest\_JPetstore : Action.c x Loadtest\_JPetstore : vuser\_init.c Smoketest\_JPetstore : Replay Summ...

HP VuGenC.Global.Action Action()

```
29 // Check on first product
30 lr_think_time(22);
31
32 /*Correlation comment - Do not change! Original value="EST-20" Name = "workingItemId" Type = "ResponseBased"*/
33 web_reg_save_param_regex(
34     "ParamName=workingItemId",
35     "RegEx=itemId=(.*)>EST-20",
36     SEARCH_FILTERS,
37     "Scope=Body",
38     "IgnoreRedirections=No",
39     LAST);
40
41 web_link("Fresh Water fish from China",
42     "Text=Fresh Water fish from China",
43     "Snapshot=t4.inf",
44     LAST);
45
46 //Text Check
47 web_reg_find("Text=Goldfish",
```

Output

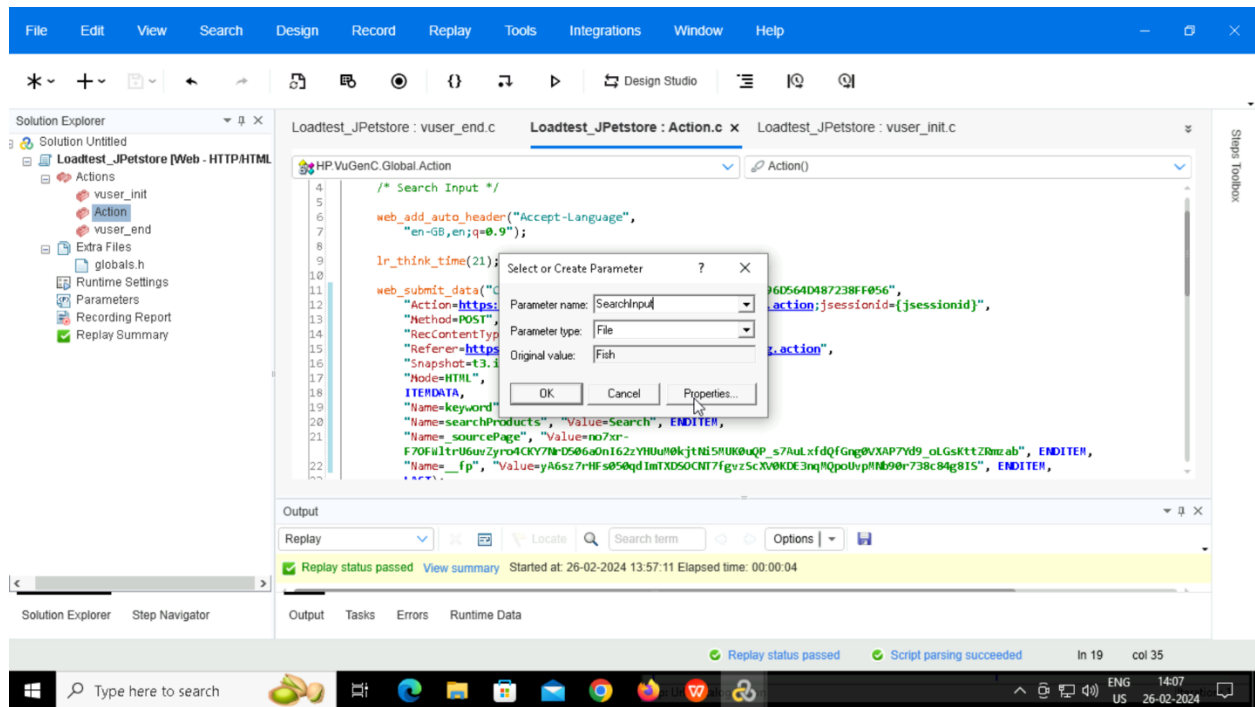
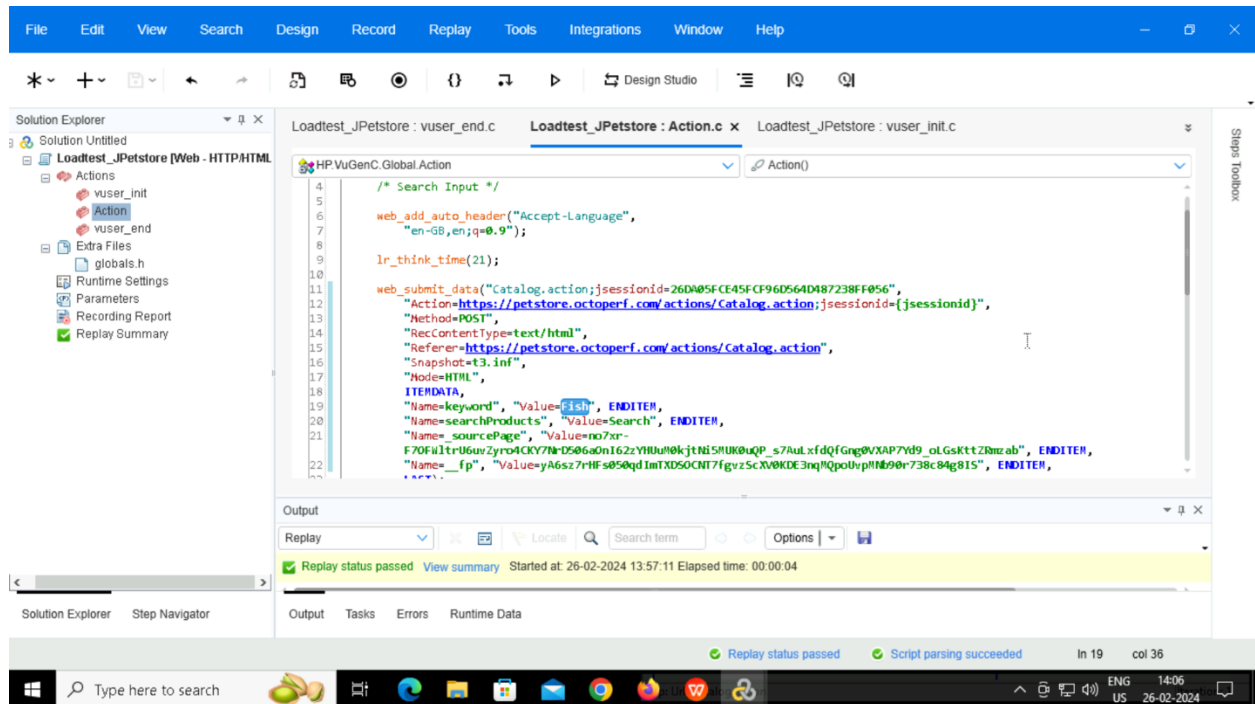
Replay

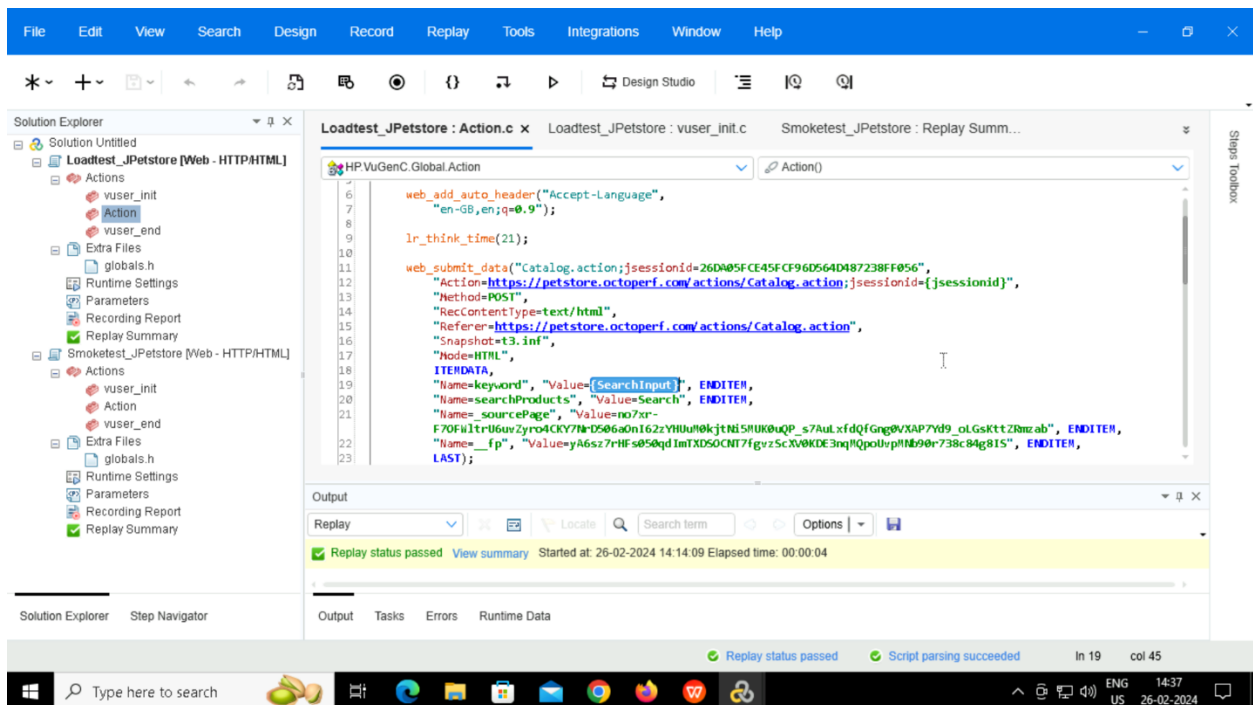
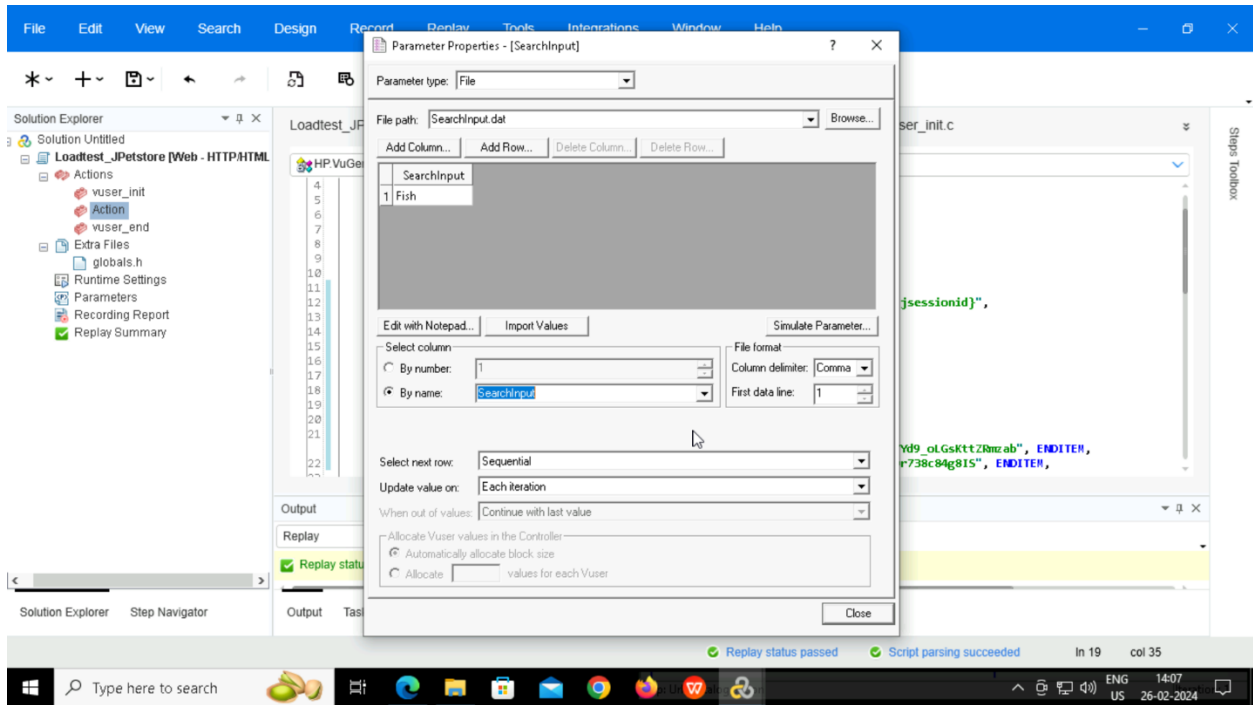
Replay status passed View summary Started at: 26-02-2024 14:14:09 Elapsed time: 00:00:04

Replay status passed Script parsing succeeded In 39 col 15

Type here to search

# Parameterization (SearchInput)





# Parameterization (jsessionId)

The screenshot shows the HP VuGen interface. The main editor displays the following script:

```
10 lr_think_time(21);
11
12 web_submit_data("Catalog.action;jsessionId=26DA05FCE45FCF96D564D487238FF056",
13               "Action=https://petstore.octoperf.com/actions/Catalog.action;jsessionId={jsessionid}",
14               "Method=POST",
15               "RecContentType=text/html",
16               "Referer=https://petstore.octoperf.com/actions/Catalog.action",
17               "Snapshot=t3.inf",
18               "Node=HTML",
19               ITENDATA,
20               "Name=keyword", "Value={SearchInput}", ENDITEN,
21               "Name=searchProducts", "Value=Search", ENDITEN,
22               "Name=sourcePage", "Value=no7xr-
23               F70FultrU6uvZyro4CKY7HrD506aOnI62zYHUu0kjtNI5HUK0uQP_s7AulxfdqfGng0VXAP7Vd9_oLGsKttZBmzab", ENDITEN,
24               "Name=__fp", "Value=yA6sz7rHFso50qdlmTXD50CNI7fgvzScXV8KDE3nqNqpoluPpNf90r738c84g815", ENDITEN,
25               LAST);
26
27 web_reg_find("Text=Fish",
28             LAST);
```

The left pane shows the project structure for 'Loadtest\_JPetstore' and 'Smoketest\_JPetstore'. The bottom status bar indicates 'Replay status passed' and 'Script parsing succeeded'.

The screenshot shows the HP VuGen interface after a successful replay. The main editor displays the same script as the first screenshot. The left pane shows the project structure for 'Loadtest\_JPetstore' and 'Smoketest\_JPetstore'. The bottom status bar indicates 'Replay status passed' and 'Script parsing succeeded'.

The output window shows the following log entries:

```
Replay
[Replay] Replay status passed View summary Started at: 26-02-2024 14:14:09 Elapsed time: 00:00:04
Action.c(6): web_add_auto_header("Accept-Language") started [MsgId: MSG-26392]
Action.c(6): web_add_auto_header("Accept-Language") was successful [MsgId: MSG-26392]
Action.c(11): web_submit_data("Catalog.action;jsessionId=26DA05FCE45FCF96D564D487238FF056") started [MsgId: MSG-26355]
Action.c(11): Notify: Parameter Substitution: parameter "jsessionid" = "4409115299E1580F07540C823F978DCA"
Action.c(11): Notify: Parameter Substitution: parameter "SearchInput" = "Fish"
Action.c(11): Resource "https://petstore.octoperf.com/css/jpetstore.css" is in the cache already and will not be downloaded
Action.c(11): Resource "https://petstore.octoperf.com/images/logo-topbar.gif" is in the cache already and will not be downl
Action.c(11): Resource "https://petstore.octoperf.com/images/cart.gif" is in the cache already and will not be downloa
Action.c(11): Resource "https://petstore.octoperf.com/images/separator.gif" is in the cache already and will not be downloa
Action.c(11): Resource "https://petstore.octoperf.com/images/sm_fish.gif" is in the cache already and will not be downloa
Action.c(11): Resource "https://petstore.octoperf.com/images/sm_dogs.gif" is in the cache already and will not be downloa
Action.c(11): Resource "https://petstore.octoperf.com/images/sm_reptiles.gif" is in the cache already and will not be downloa
```

## Text check (Text=Fish)

The screenshot shows the HP VuGen interface with the following components:

- Solution Explorer:** Displays the project structure for 'Loadtest\_JPetstore [Web - HTTP/HTML]'. The 'Actions' folder contains 'vuser\_init', 'Action', 'vuser\_end', and 'Extra Files'. The 'Smoketest\_JPetstore [Web - HTTP/HTML]' folder contains 'vuser\_init', 'Action', 'vuser\_end', 'Extra Files', 'globals.h', 'Runtime Settings', 'Parameters', 'Recording Report', and 'Replay Summary'.
- Script Editor:** Shows the 'Action.c' script with the following code:

```
22 F70FvltR06uv2yro4CKY7HrD506a0nI62zYHUu90kjtMIS4UK0uQp_s7Aut.xfdqfGng0VXAP7td9_oLGakttZl8mab", ENDITER,  
23 "Name=__fp", "Value=yA6sz7rHFs050qdImTAD50CNt7fgyz5cXv0KDE3mqHqpoUrpHh90r738c0Ag815", ENDITER,  
24 LAST);  
25  
26 web_reg_find("Text=Fish",  
27 LAST);  
28 /* Click on first Product */
```
- Output Window:** Displays the replay status and log messages. The status is 'Replay status passed'. The log shows the following messages:
  - Action.c(41): Resource "https://petstore.octoperf.com/images/sm\_cats.gif" is in the cache already and will not be downloaded.
  - Action.c(41): Resource "https://petstore.octoperf.com/images/sm\_birds.gif" is in the cache already and will not be downloaded.
  - Action.c(41): Notify: Saving Parameter "workingItemId = EST-20".
  - Action.c(41): Registered web\_reg\_find successful for "Text=Fish" (count=1) [MsgId: MMSG-26364]
  - Action.c(48): web\_reg\_find started [MsgId: MMSG-26355]
  - Action.c(48): Registering web\_reg\_find was successful, 3661 body bytes, 222 header bytes [MsgId: MMSG-26390]
  - Action.c(53): web\_link("Add to Cart") started [MsgId: MMSG-26355]
  - Action.c(53): Linking to "https://petstore.octoperf.com/actions/cart.action?addItemToCart=&workingItemId=EST-20", Target Fr
  - Action.c(53): Resource "https://petstore.octoperf.com/css/jpetstore.css" is in the cache already and will not be downloaded.
  - Action.c(53): Resource "https://petstore.octoperf.com/images/logo-topbar.gif" is in the cache already and will not be downl
  - Action.c(53): Resource "https://petstore.octoperf.com/images/cart.gif" is in the cache already and will not be downloaded a
- Status Bar:** Shows 'Replay status passed', 'Script parsing succeeded', 'In 78', 'col 77', and the system clock '14:45 26-02-2024'.

## Text check (Text=Shopping Cart)

The screenshot shows the HP VuGen interface with the following components:

- Solution Explorer:** Displays the project structure for 'Loadtest\_JPetstore [Web - HTTP/HTML]'. The 'Actions' folder contains 'vuser\_init', 'Action', 'vuser\_end', and 'Extra Files'. The 'Smoketest\_JPetstore [Web - HTTP/HTML]' folder contains 'vuser\_init', 'Action', 'vuser\_end', 'Extra Files', 'globals.h', 'Runtime Settings', 'Parameters', 'Recording Report', and 'Replay Summary'.
- Script Editor:** Shows the 'Action.c' script with the following code:

```
54 //Text Check  
55 web_reg_find("Text=Shopping Cart",  
56 LAST);  
57  
58 lr_think_time(15);  
59  
60 web_link("Add to Cart",  
61 "Text=Add to Cart")
```
- Output Window:** Displays the replay status and log messages. The status is 'Replay status passed'. The log shows the following messages:
  - Action.c(53): Resource "https://petstore.octoperf.com/images/sm\_reptiles.gif" is in the cache already and will not be downloa
  - Action.c(53): Resource "https://petstore.octoperf.com/images/sm\_cats.gif" is in the cache already and will not be downloade
  - Action.c(53): Resource "https://petstore.octoperf.com/images/sm\_birds.gif" is in the cache already and will not be downloade
  - Action.c(53): Registered web\_reg\_find successful for "Text=Shopping Cart" (count=1) [MsgId: MMSG-26364]
  - Action.c(53): web\_link("Add to Cart") was successful, 4209 body bytes, 222 header bytes [MsgId: MMSG-26386]
  - Ending action Action.
  - Ending iteration 1.
  - Ending vuser...
  - Starting action vuser\_end.
  - vuser\_end.c(4): web\_add\_header("Accept-Language") started [MsgId: MMSG-26355]
  - vuser\_end.c(4): web\_add\_header("Accept-Language") was successful [MsgId: MMSG-26392]
  - vuser\_end.c(9): web url("Catalog.action") started [MsgId: MMSG-26355]
- Status Bar:** Shows 'Replay status passed', 'Script parsing succeeded', 'In 56', 'col 15', and the system clock '14:49 26-02-2024'.



# Image Check

The screenshot displays the HP VuGen interface with a LoadTest script named `Loadtest_JPetstore : Action.c`. The script includes a `vuser_init` function that performs a web image check. The code is as follows:

```
45 web_set_sockets_option("TLS_SNI", "0");
46
47 //Image check
48 web_image_check("JPetstore Logo", "Src=../images/logo-topbar.gif", LAST);
49
50 return 0;
51
52
53
```

The Output window shows the following log messages:

```
Replay status passed View summary Started at: 26-02-2024 14:14:09 Elapsed time: 00:00:04
vuser_init.c(40): web_link( enter the store ) was successful, 49136 body bytes, 424/ header bytes [MsgId: MSG-26380]
vuser_init.c(45): web_set_sockets_option started [MsgId: MSG-26355]
vuser_init.c(45): web_set_sockets_option was successful [MsgId: MSG-26392]
vuser_init.c(47): web_image_check started [MsgId: MSG-26355]
vuser_init.c(47): "JPetstore Logo" succeeded (1 occurrence(s) found. Alt="", Src=../images/logo-topbar.gif") [MsgId: MSG-26392]
vuser_init.c(47): web_image_check was successful [MsgId: MSG-26392]
Ending action vuser_init.
Running Vuser...
Starting iteration 1.
```

The bottom status bar indicates "Replay status passed" and "Script parsing succeeded". The Windows taskbar at the bottom shows the system clock as 14:50 on 26-02-2024.

# LoadRunner Controller

## Adding Scripts

LoadRunner Controller - JPetstore\_Scenario - [Design(2)]

File View Scenario Results Diagnostics Tools Help

Scenario Groups

Group Name	Script Path	Quantity	Load Generators
loadtest_ipetstore	D:\Load Runner Exam II\VuGen Scripts\JPetstore_Solution\Loadtest_IPetstore	1	localhost
smoketest_ipetstore	D:\Load Runner Exam II\VuGen Scripts\JPetstore_Solution\Smoketest_IPetstore	1	localhost

Service Level Agreement

New Details Edit Delete Advanced

Service Level Agreement  
Currently no SLA rules are defined for the load test.  
Click the New button to define SLA criteria for your load test.

Scenario Schedule

Schedule Name: Schedule 1

Schedule by: Scenario Group

Run Mode: Real-world schedule Basic schedule

Global Schedule

Total: 2 Vusers

Action	Properties
Initialize	Initialize each Vuser just before it runs
Start Vusers	Start 2 Vusers: 1 every 00:00:15 (HH:MM:SS)
Duration	Run for 00:02:00 (HH:MM:SS)
Stop Vusers	Stop all Vusers: 1 every 00:00:30 (HH:MM:SS)

Design Run

Auto Collate Results

ENG 15:00 26-02-2024

## Adding Vusers

LoadRunner Controller - JPetstore\_Scenario - [Design(3)]

File View Scenario Results Diagnostics Tools Help

Scenario Groups

Group Name	Script Path	Quantity	Load Generators
loadtest_ipetstore_1	D:\Load Runner Exam II\VuGen Scripts\JPetstore_Solution\Loadtest_IPetstore	1	localhost
loadtest_ipetstore	D:\Load Runner Exam II\VuGen Scripts\JPetstore_Solution\Loadtest_IPetstore	1	localhost
smoketest_ipetstore	D:\Load Runner Exam II\VuGen Scripts\JPetstore_Solution\Smoketest_IPetstore	1	localhost

Service Level Agreement

New Details Edit Delete Advanced

Service Level Agreement  
Currently no SLA rules are defined for the load test.  
Click the New button to define SLA criteria for your load test.

Scenario Schedule

Schedule Name: Schedule 1

Schedule by: Scenario

Run Mode: Real-world schedule

Global Schedule

Total: 4 Vusers

Action	Properties
Initialize	Initialize each Vuser just before it runs
Start Vusers	Start 4 Vusers: 1 every 00:00:15 (HH:MM:SS)
Duration	Run for 00:02:00 (HH:MM:SS)
Stop Vusers	Stop all Vusers: 1 every 00:00:30 (HH:MM:SS)

Vusers(7)

ID	Status	Script	Load Generator Elapsed Time
1	Down	Loadtest_IPetstore	localhost
2	Down	Loadtest_IPetstore	localhost
3	Down	Loadtest_IPetstore	localhost

Run Gradual Stop Stop Reset Details... Add Vuser(s) Refresh Help Close

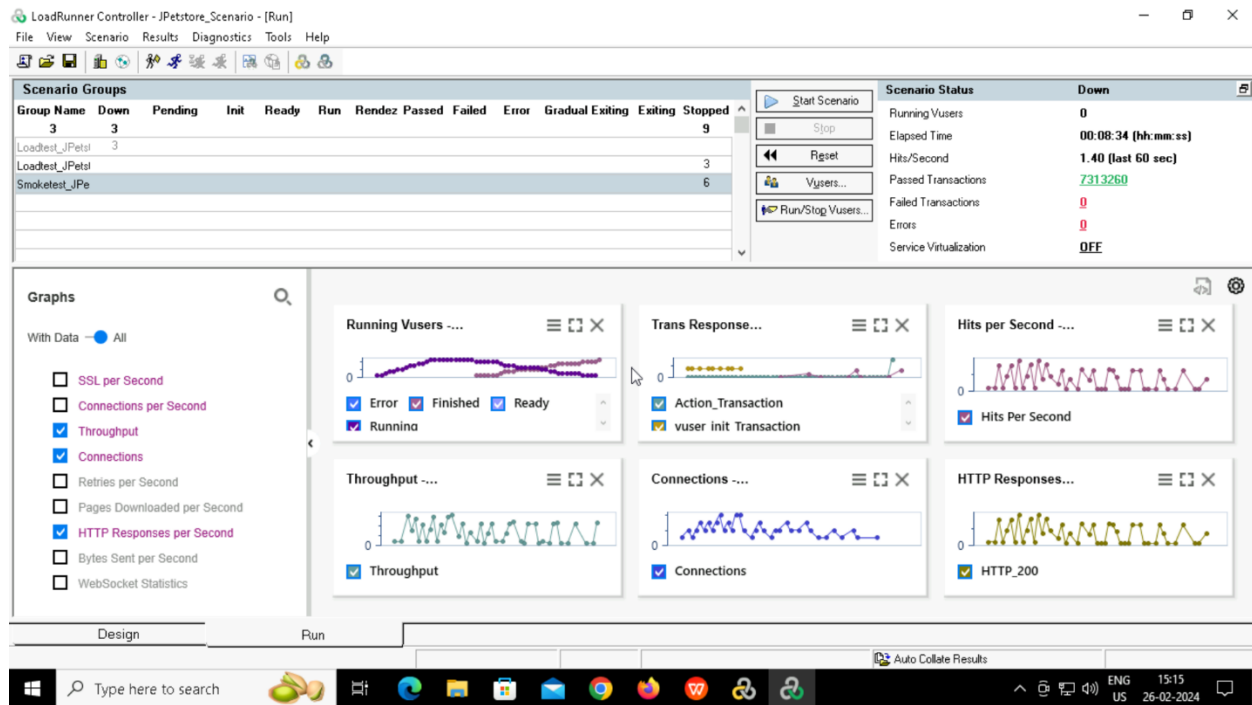
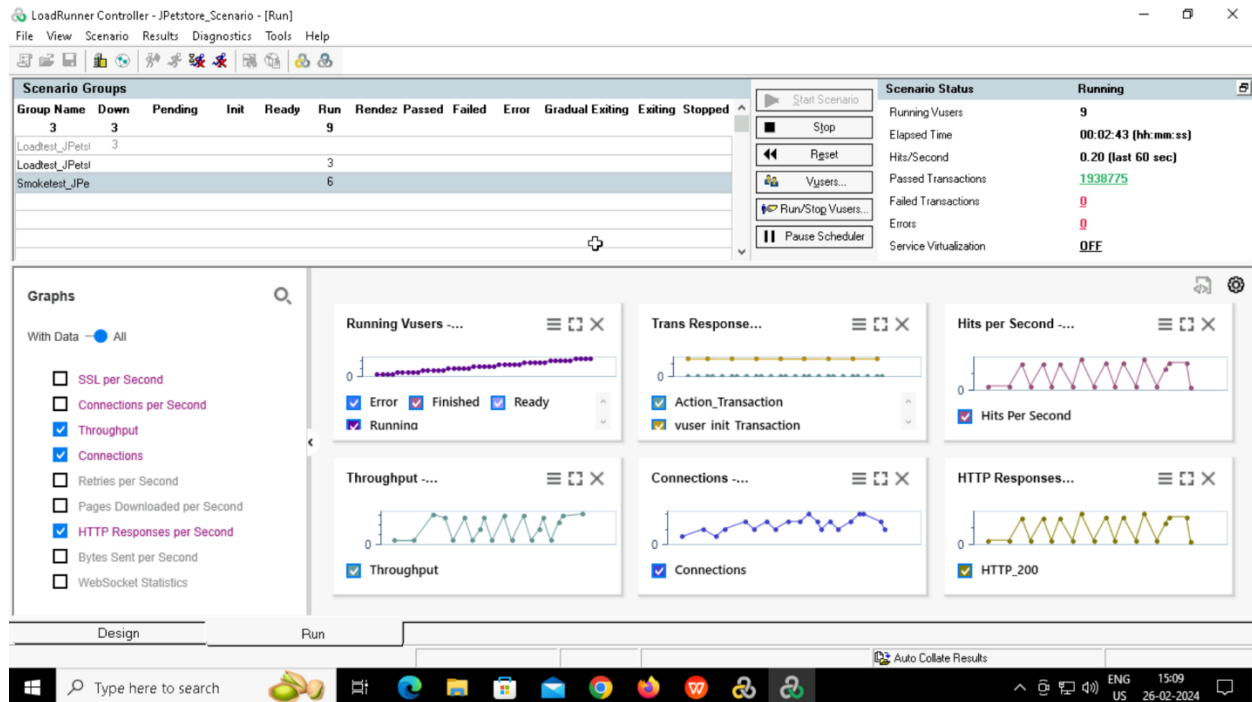
Design Run

Auto Collate Results

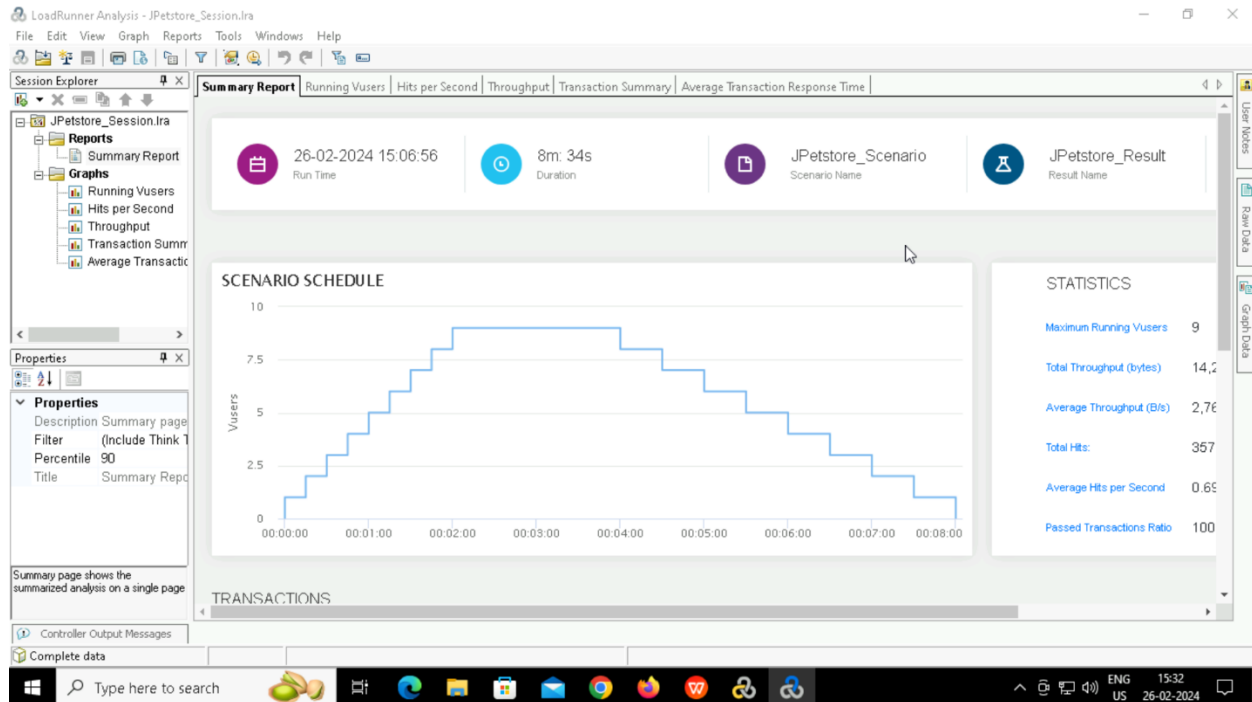
ENG 15:03 26-02-2024



# Starting a Scenario



# LoadRunner Analysis



# HTML Report

