

MBC Test Scripts

Test Case and Scripts Details:-

- In compression we have to test three main functionalities –
 - Integrity of data
 - Compression ratio
 - Bandwidth utilization
 - And few GUI and other parameters.
- Test cases have been written for first two features. Test cases have been divided according to -
 - Level of compression
 - Read/Write operation
 - Type of data
 - Protocol
 - Single thread / multi-thread same set of data / multi-thread different set of data
- Third feature will be started after completion of previous two.

Features of scripts:-

- Each script has meaningful comments wherever required. Within the script you can check the behavior of the script and pass/fail criteria. For precise help you can type 'perl script.pl -help'.
- Each script is parameterized. If parameter values are not given it will take the default values assign within the scripts.
- Scripts are objected oriented and packaged.
- Based on XML – RPC which provides the benefit of initiating the execution from any machine within the network. But actual operations will be done by the nodes at orbital setup.
- These scripts can be integrated with any ATS. Only configuration file needs to be populated properly before initiating the execution. Comments are written for each item in the configuration file and it's easy to understand.
- Most of these scripts can be executed for Edge setup too with little or no changes. Will be coming with best solution in the coming days where we can directly execute on any setup.

Limitations / Enhancements

- Function/tool is not available to create medium compressible file. I will work on this in few days. For the time being you need to put required size of medium compressible files (*.srf files) under folder '1' in shared directory.
- Few of the scripts are not tested on Linux setup. I will be testing them once I get a test pod. But they will work with little or no changes.
- Right now scripts are not setting any service class policy for MBC so you are test pod is expected to in MBC mode. This we need to do from the ATS or if not then I need to modify few library functions.
- We may need to add/modify/delete few WAN Scalar device parameters for the execution of these scripts. Will add them as we need.

Deployment and Execution Steps:

1. Install & Configure Web Servers at the servers & clients. (You can choose IIS or Apache). Make sure that default web site is accessible without any authentication.
2. Install & Configure FTP Servers at the servers and clients. Make sure that default ftp site is accessible for anonymous user.
3. Install Perl and set/verify the path on all the machines.
4. Configure .cgi support on Web Servers.
 - a. Right click on default web site at IIS management console screen and select properties.
 - b. Select 'Home Directory' tab.
 - c. Select 'Configuration...' Button in web site properties window.
 - d. Add the application mappings for .cgi pointing to Perl.exe in your system.
5. Create a virtual directory under default web site with name 'http-path' and point to the shared folder (as per config.pm file). Give write permission to the virtual directory.
6. Create a virtual directory under default ftp site with name 'ftp-path' and point to the shared folder (as per config.pm file). Give write permission to the virtual directory.
7. Create folders 'cgi-bin\xml-rpc\library' under the default web site.
8. Copy the library files XMLRPC_Library.cgi and XMLRPC_Thread.cgi to 'cgi-bin\xml-rpc\library' directory.
9. Configure the file security information for the files in above step as follows on all the machines–
 - a. Set the anonymous user name to administrator.
 - b. Assign the password and uncheck 'Allow IIS to control password'.
10. Copy the folder 'ORAPP' to ..\Perl\lib' folder on all the machines.
11. Download and place Wget and fsum utilities anywhere in the path on all the machines.
12. Copy the 'Scripts' folder to any machine within the network from where you want to execute the scripts.
13. Make sure that WAN Simulator configuration scripts are present and executing properly on the DR.
14. Set the values of variables in config.pm according to your test pod setup. Meaningful comments are there for each variable in the script.
15. Make sure that 'XmlRpc.OnlyFromLocalhost' is set to 'off' on both or all the WAN Scalar devices.
16. Test one script and if it's able to execute either pass/fail means you are done.

References:

- All the scripts can be found into perforce server <http://10.201.1.76:8080> under folder [//depot/Test Scripts/Compression/MBC/](#).
- Library functions are under 'ORAPP' folder under above mentioned location.
- XML-RPC libraries are under 'XML-RPC' folder under above mentioned location.
- Test cases are under [//depot/Test Cases/](#) at the above mentioned http address.
- Required utilities (Perl, wget, fsum etc) are under [//depot/Tools/](#) at the above mentioned http address.