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Sample Web Service wrapper on z/TPF Enterprise Edition V1.1

Note: Before using this information and the product it supports, read the general information under "NOTICES" in this document.

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1.0 ABOUT THIS README

This readme file will guide you through the process of downloading, installing, and using a Sample Web service wrapper on your z/TPF system. This sample application demonstrates how to use the Web Services Deployment Table (WSDT) based deployment mechanism (APAR PJ31953).

The Sample Web service wrapper package provides you with a complete sample that can be run on your z/TPF system. You can use it as a starting point for your own Web service wrappers, use it for training purposes, or use it as-is. Go to the IBM TPF Product Information Center for more details about SOAP support.

Note: The TPF development lab does not maintain this application and will not accept APARs on this code.

2.0 SYSTEM REQUIREMENTS

Before proceeding with these instructions, ensure that PJ31953 has been applied to your z/TPF system and that at least one SOAP Communications binding has been installed on your z/TPF system. Two sample SOAP communications bindings are available for download at www.ibm.com/tpf/download/ztpfsoap.htm.

3.0 DOWNLOADING

To download this module, do the following:

1. Click the **Download now** button to download the compressed sample Web service wrapper package (the "tarball") to your PC. The name of this package is **ws_wrapper_sample_zTPF.tar.Z**.
2. FTP the tarball to your home directory on your Linux system using binary mode:
   - Open an MS-DOS window and activate FTP by using the following command:
     ftp *your.linux.build.machine.com*
   - Sign in using your user name and password.
   - Set the mode to binary by entering the following command:
     binary
   - Send the file to your Linux system by using the following command:
     send c:*your_path*\\ws_wrapper_sample_zTPF.tar.Z ws_wrapper_sample_zTPF.tar.Z
   - Exit FTP by entering the following command:
     bye

3. On your Linux system, create a working directory in your root directory by entering the following command:

   mkdir ~/your_workdir

4. Change to the working directory and extract the program files from the sample Web service wrapper package by entering the following command:

   cd ~/your_workdir
   tar -xzkf ../ws_wrapper_sample_zTPF.tar.Z

   After you have completed this step, you will have the following files on your Linux system:

   1. In the directory: ~/your_workdir/soap
      - Sample z/TPF Web service wrapper application code (csob.c)
      - MakeTPF sample makefile (csob.mak)
   2. In the directory: ~/your_workdir
      - Sample provider Web service deployment descriptor for the Sample application (CalculatorService.xml).
      - Sample Web Service Description Language (WSDL) for the sample application (CalculatorService.wsdl).
      - Sample client for the sample application (samplewrapper_client.html).
      - This readme (samplewrapper_readme.htm).

4.0 COMPILING, LINKING, AND LOADING

1. Change to the 'soap' directory:

   cd ~/your_workdir/soap

2. Create a `maketpf` configuration file named `maketpf.cfg`.
   - Ensure that the first assignment of `TPF_ROOT` in `maketpf.cfg` is the absolute path to your "*/your_workdir*" directory.
   - Ensure that the first assignment of `APPL_ROOT` in `maketpf.cfg` is the absolute path to your "*~/your_workdir*" directory.
   - Update other fields (`TPF_BSS_NAME`, `TPF_SS_NAME`, `USER_VERSION_CODE`) if necessary.

3. Edit the sample `maketpf.mak` file for the sample Web service wrapper (csob.mak). Verify that the `maketpf_env` assignments in `csob.mak` are correct for your build environment.

4. Compile and link the Web service wrapper sample program.

   maketpf csob.mak -f

5. Use the standard load procedure to transfer and load the Web service wrapper program (csob) to your test system.

5.0 DEPLOYING

To deploy the sample Web service wrapper, making it accessible to the z/TPF SOAP support, you will need to FTP the provider Web service deployment descriptor to your z/TPF system and use the ZWSAT DEPLOY z/TPF command.

1. FTP the provider Web service deployment descriptor to the `/etc/tpf-ws/` directory on your z/TPF system using binary mode:
   - Change to the 'your_workdir' directory:
     cd ~/your_workdir
   - FTP by using the following command:
     ftp *your.zTPF.system*
   - Sign in using your user name and password.
   - Set the mode to binary by entering the following command:
     binary
   - Send the file to your z/TPF system by using the following command:
     send CalculatorService.xml /etc/tpf-ws/CalculatorService.xml
   - Exit FTP by entering the following command:
     bye

2. On your z/TPF system, deploy the Provider Web service by entering the following command:

   ZWSAT DEPLOY DD-CalculatorService.xml

6.0 RUNNING

To run the Web service wrapper sample application using the CalculatorService.wsdl, you will need an HTTP server (e.g. Apache) and a SOAP communications binding for your HTTP server to interact with the z/TPF SOAP support. To use the CalculatorService.wsdl file you will need to edit it to fill in the location of your z/TPF system's HTTP server (update the `location`

attribute of the `wsdlsoap:addresss` element, currently set to `http://xxx.xxx.xxx.xxx/`).

Once you have edited the CalculatorService.wsdl file, it can be used by tooling to generate SOAP Consumer requests for this sample Web service. The IBM TPF Toolkit for Websphere Studio V3.2 contains a Web services explorer that can take a WSDL file as input and generate an HTML form so that you can generate and send individual SOAP Consumer requests to your z/TPF system.

Alternatively, you can use the included samplewrapper_client.html page to send SOAP Consumer requests to this service. To use this client you will need to transfer the file to a PC and open it with Microsoft Internet Explorer Version 5 or later and follow the instructions.

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