SupportPac CH1C –

Service Flow Feature of CICS TS v3.2: Service Flow Example

Installation and User's Guide
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Note! Before using this information and the product it supports, be sure to read the general information under "Notices" on page 13.

1. Contents

2. Introduction

This SupportPac provides a sample service flow and driver application, to run the service flow, that you can run from a CICS terminal using the Service Flow Feature of CICS Transaction Server version 3.2. You can use this SupportPac to test that program links using a CICS channel and link 3270 bridge invocations can be made from within a service flow successfully. These tests provide a good level of confidence that the CICS Service Flow Runtime has been installed and configured suitably.

This SupportPac does not require you to have access to Rational Developer for System z.

This document outlines the installation steps required to deploy the service flow and run the tests. As part of the installation, various CICS resources will be installed into the target region.

3. SupportPac files

This SupportPac contains the following files:

Files	Description
License Directory	Directory of license information
SupportPac CH1C.pdf	This document
COMPILE.jcl	Sample JCL to compile the supplied COBOL applications
SFFEXAM0.sfp SFFEXAM1.sfp SFFEXAML.cbl SFFEXAMP.cbl	Generated service flow (including service flow subflow)
SFFEXMPL.cbl	COBOL program to drive the service flow and handle the response. Also, a CICS application for the service flow to interact with

4. Service Flow Overview

The diagram below illustrates the service flow contained within this SupportPac:
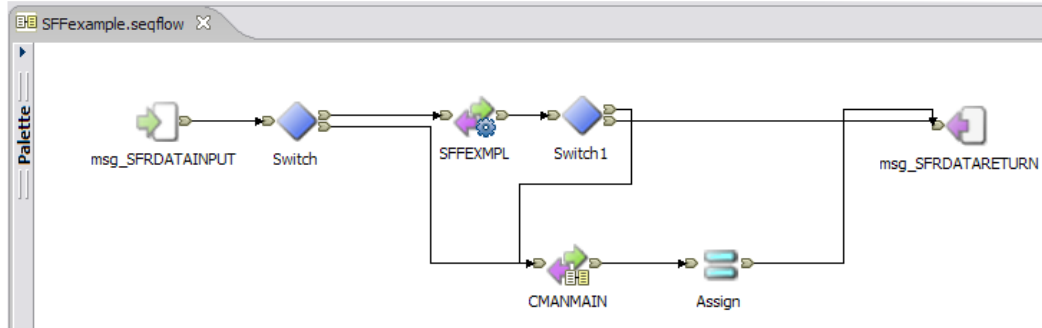
This service flow aggregates two invocations of CICS applications.

1. A program link invocation using a CICS channel, labelled SFFEXMPL in the diagram above.
   The service flow will link to the CICS application SFFEXMPL, defined during the installation of this SupportPac.
2. A link3270 bridge invocation, labelled CMANMAIN in the diagram above.
   Using the Link3270 Bridge, the service flow will automate screen interactions with the flow management transaction, CMAN.

The behaviour of the service flow is dependent on the data passed as input into the flow. The input data and result of the service flow is handled by the driver application supplied in this SupportPac, SFFEXMPL. One, or both, of the invocations within the service flow can be run by altering the arguments to the driver application, see section '7. Running the service flow'.

5. Requirements

You must meet the following requirements to use this SupportPac.

- The Service Flow Feature for CICS TS v 3.2 is installed in the target CICS region.
- High-level qualifiers of installed Service Flow Feature are known to you.
- You have the authority to compile, define and run new applications and service flows to the target CICS region including authority to write to zFS.
- The CICS region has a screen size of 24x80 to successfully run the link3270 bridge test.
- You have the authority to define, create and run new resources in the target CICS region.

6. Installing the SupportPac

1. Extract all files from the SupportPac archive file. Check that all files listed in section '3. SupportPac files' are on your workstation.

2. Customize the sample JCL file, COMPILE.jcl.
   This JCL file is used to compile the three required COBOL programs.
   You must know the high-level qualifier for the CICS Service Flow Runtime and deployed service flows.
   The JCL job assumes the following PDS configuration for deployed service flows:

%MAT_HLQ%.USER.SRCLIB	Data set for generated service flow COBOL source files
%MAT_HLQ%.USER.COPYLIB	Data set for generated service flow COBOL copybook files
%MAT_HLQ%.USER.LINKLIB	Data set for compiled service flow object code and declared in the CICS RPL list

   (Alterations might be required for site specific configurations).

   i. Edit the first two lines to form a valid job card for JCL submission.
   ii. Replace all occurrences of variables in the following table with the actual system values:

Variable to be substituted	Description of term
%MAT_HLQ%	High-level qualifier of deployed service flows
%MAT_UID%	User ID that you want to be used in the JCL file
%MAT_ACCOUNT%	Account identifier that you want to be used in the JCL file
qual	High level qualifier for installed CICS Service Flow Runtime libraries
hlqcics	High level qualifier for CICS TS v3.2 libraries

3. Transfer updated COMPILE.jcl file to host location:
   *myhlq.*USER.JCLLIB

4. Transfer COBOL programs SFFEXMPL.cbl, SFFEXAMP.cbl and SFFEXAML.cbl to host location:
   *myhlq.*USER.SRCLIB

5. Compile the COBOL programs.
   i. Submit the customized JCL file *myhlq.*USER.JCLLIB(COMPILE)
   ii. Ensure all step return codes are 0

Unless updated during customization of COMPILE.jcl, the compilation steps place the object code in data set *myhlq*.USER.LINKLIB. Ensure this dataset is declared in the CICS RPL list.

6. Transfer service flow properties files, SFFEXAM0.sfp and SFFEXAM1.sfp, to the service flow deployment zFS location defined to the CICS region.

7. Install the service flow in CICS TS v3.2 using CMAN, the service flow management transaction.
    The following resources are created:
    *   3 PROGRAM resources: SFFEXAMPL, SFFEXAMP, SFFEXAML
    *   3 TRANSACTION resources: SFFE, SFFC, SFF1
    *   2 PROCESSTYPE resources: SFFEXAM0, SFFEXAM1

    i.   From a CICS terminal enter transaction CMAN. This transaction starts the service flow management utility.
    ii. Press F2 to install newly deployed service flows.
    iii. Press Enter to refresh the screen. Two entries with names SFFEXAM0 and SFFEXAM1 are displayed in the enabled state.

```
Session A - [24 x 80]                                                  _ □ ✕
File  Edit  View  Communication  Actions  Window  Help
▢ │ ▤▤ │ ▦▦ │ ▦▦ │ ▦ │ ▦▦ │ ▦▦ │ ▦ │ ❖✦
 DFHMA00       CICS TS V3.2 Service Flow Runtime - Installed Service Flows

 Request name filter: *_____                                     More:
 Actions: 1= View details 2= Enable 3= Disable 4= Delete

  Act   Request name     Status     Use count    Response
   _       SFFEXAM0       Enabled      0
   _       SFFEXAM1       Enabled      0












 DFHMA00215I All actions completed
 F1=Help    F2=Install flows   F3=End   F7=Page Up    F8=Page Down   F12=Cancel
MA          a                                                        07/004
```

7. Running the service flow

The installed transaction, SFF1, and driver application, SFFEXMPL, provide a simple method to initiate and check the service flow.

1. From a CICS terminal session, run transaction SFF1. You can provide the following optional transaction arguments:

Transaction command	Description of command
SFF1	Runs the service flow to test both program link and link 3270 bridge invocations
SFF1 PL	Runs the service flow to test program link invocation
SFF1 LB	Runs the service flow to test link 3270 bridge invocation

For example:
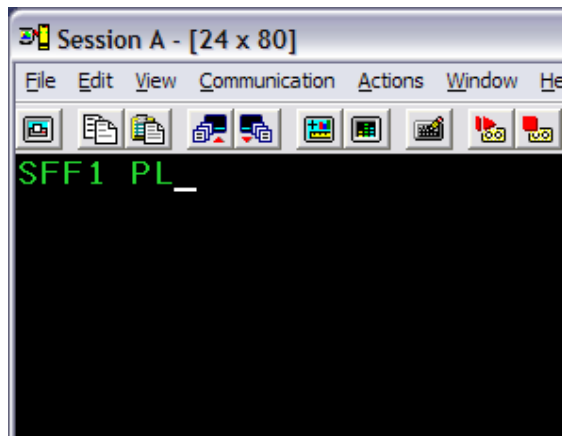
2. Press Enter to run the service flow.
   The results are displayed directly to the terminal session screen
   - The form of the results are:
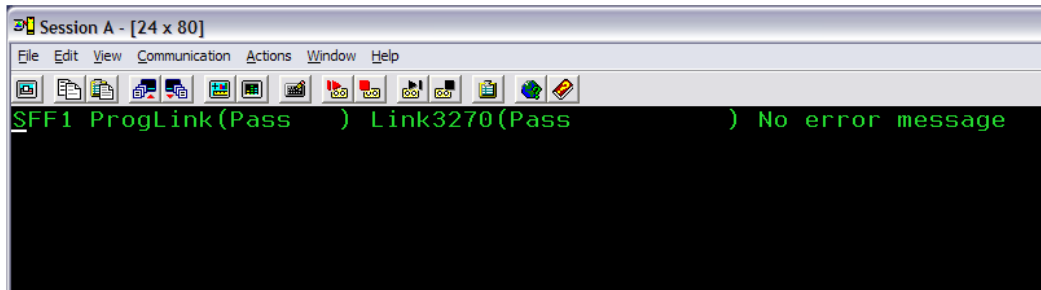   "SFF1 ProgLink(*result1*) Link3270(*result2*) *message*"
     Where:
     result1   - is 'Pass', 'Fail' or 'Not Run'
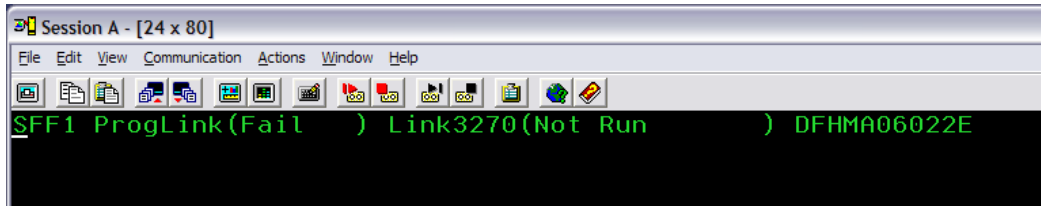   *result2*   - is 'Pass', 'Fail', 'Not Run' or 'Screen Unknown'
     message   - is 'No error message' or returned error message

   Examples:

   Or

8. Troubleshooting

If any errors occur with the installation or running of the service flow (for example, the SupportPac driver application returns a DFHMA*nnnnn* error message), refer to the CICS Service Flow Runtime v3.2 User's Guide. The documentation is published in the CICS TS v3.2 Information Center: http://publib.boulder.ibm.com/infocenter/cicsts/v3r2/index.jsp

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