



# ASLSUBCM

## *Program Information*

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# 1 Program Overview

The program, **ASLSUBCM**, is a utility program that can be used to issue start or stop commands for a subsystem. As written, it will start or stop an MQ or DB2 subsystem. This can be easily changed to issue start or stop commands for any subsystem.

**ASLSUBCM** is useful if you don't have an automation product available on the system, or to recycle subsystems outside of automation, if needed.

Even if your shop has automation processes in place this program shows how to issue a command from a program using SVC 34.

**ASLSUBCM** also utilizes a multi-line WTO and a WTOR.

The program will search the SSVT for any MQ subsystems and determine the state of them (active or inactive). **ASLSUBCM** will use the subsystem recognition character for start or stop the subsystem.

There are a couple of ways to determine the subsystem action to be taken.

- The first is that the action to be taken can depend upon the first 4 characters of the jobname. If the jobname starts with "STOP" the chosen subsystem will be shutdown. If the jobname starts with "STAR" the chosen subsystem will be start. If **ASLSUBCM** detects that the chosen subsystem is already in the desired state (or is not defined) no action is taken.
- Using a NOCHECK DD DUMMY card you can bypass the jobname check. If you use the NOCHECK option, you **must** provide either a STOP DD DUMMY JCL card or a START DD DUMMY JCL card.

As the program issues SVC 34 it **must** be APF authorized.

## 1.1 Program Limitations

**ASLSUBCM** has a limit on the number of subsystem names that it can list in the multi-line WTO. The limit, as coded, is 40. This limit is probably going to be more than a site needs, but it is there. To increase this limit, repeat one of the lines in the WTO skeleton.

```
000378 LISTWTO WTO (' The following MQ subsystems are active: ',D), X
000379 (' ',D), X
000380 (' ',D), X
000381 (' ',D), X
000382 (' ',D), X
000383 (' ',DE), X
```

Be aware of the continuation character in column 72. The line must be the same length as the other lines in WTO otherwise unpredictable results will occur, probably an S0C4, but in any case, it won't be good as the program is coded to add 8 subsystems per line.

If any lines are added be aware of the IBM restriction on the number of lines for a multi-line WTO although we doubt you will get anywhere near 65533 lines!

The program will calculate the number of lines it requires, and it will determine if the WTO skeleton is large enough to continue.

If the target subsystem is a DB2 system, then the program should be permitted to issue start and stop commands in the security of DB2.

Any WTO lines not required by **ASLSUBCM** will not be displayed.

## **1.2 Passed Parameters**

**ASLSUBCM** accepts an optional parameter. The parameter is the 4-character name of the subsystem to be started or stopped. .

If no parameter is passed to the program a WTOR will be issued.

## **1.3 Called Programs**

None. However, the program does call SVC 34

## **1.4 IBM Macros used:**

CVT	DEVTYPE	DOM	IEFJESCT
MODESET	STORAGE	WAIT	WTO
WTOR			

## **1.5 User Macros used:**

None

## **1.6 Compiled User Values**

There are no user values to be compiled before using **ASLSUBCM**.

## 2 Installation Procedure

### 2.1 From XMI File

The XMI (or XMIT) file is in IBM TSO TRANSMIT format and **must** be transferred to z/OS™ as a fixed blocked 80-byte BINARY file. The disk space requirement for the file is approximately 58 blocks of 3390 disk when blocked at 27920.

The FTP process (if performed in a 3270 emulator) must be performed in TSO READY mode or in option 6 of ISPF™.

The dataset name used as input for the TSO TRANSMIT was ABBYDALE.ASLSUBCM.PDS. Unless this is changed by the TSO RECEIVE (Please refer to the IBM RECEIVE command for details on the use of this TSO command) command it will be the name of the dataset created by the RECEIVE command.

Once this dataset has been RECEIVED you will need to execute the UNPACK member. This will unpack all the TRANSMITTED datasets. You will have the option of changing the high-level qualifier for the datasets to be created.

The UPACK member should unpack three datasets. These are:

- |                              |   |
|------------------------------|---|
| <i>Hlq</i> .ASLSUBCM.JCL     | Contains the JCL procedure for assembling <b>ASLSUBCM</b> . It also contains the JCL for running <b>ASLSUBCM</b> and the JCL for assembling the program |
| <i>Hlq</i> .ASLSUBCM.LOADLIB | Contains the pre-assembled load module. This is 'run ready'.  |
| <i>Hlq</i> .ASLSUBCM.SOURCE  | Contains the source code for <b>ASLSUBCM</b> .  |

:

Once the ABBYDALE.ASLSUBCM.PDS dataset has been received please refer to the \$\$INSTAL member to complete the installation.

A copy of this document is also available in the **ASLSUBCM**.PDS dataset. This should be transferred to a Windows system as a binary file and saved as a .PDF file.

### 3 Using ASLSUBCM

ASLSUBCM is executed as a standalone program via JC or executed as a started task.

ASLSUBCM must run on the system that has the **target** subsystem defined on it. If the subsystem is not defined on the system, then the program will terminate with a return condition code of 12.

#### 3.1 Available Parameters

ASLSUBCM has one optional parameter. The optional parameter is a 4-character subsystem identifier.

If no parameter is passed communication will be through the operator console.

#### 3.2 Required JCL for ASLSUBCM

```

1. //jobname   JOB
2. //stepname  EXEC PGM=ASLSUBCM, PARM='qmgr'
3. //STEPLIB   DD  DISP=SHR, DSN=your.load.library
4. //NOCHECK   DD  DUMMY
5. //STOP      DD  DUMMY
6. //START     DD  DUMMY
7. //DB2       DD  DUMMY

```

JCL card	Required	Use
1	Yes	JOB CARD (Tailor to your site standards). This may not be required if the program is going to be executed as a started task.
2	Yes	EXEC card. This has an optional parameter that can be passed.
3	Yes	This is the library where <b>ASLSUBCM</b> is located.  The STEPLIB concatenation can only be removed if the module resides in a LNKLST library.  <b>The library must be authorized.</b>
4	No	The NOCHECK DD card indicates that <b>ASLSUBCM</b> should bypass the internal jobname check.
5	No	The STOP DD card indicates that the subsystem should have a stop command issued for it.
6	No	The START DD card indicates that the subsystem should have a start command issued for it.
7	No	The DB2 DD indicates that the target subsystem is a DB2 system. If omitted MQ subsystems will be assumed.



### 3.3 Responding to the ASLSUBCM WTOR

If the operator console is being used (i.e., No parameter was passed to **ASLSUBCM**) communication with the program will be via the operator console using a multi-line WTO and a WTOR.

The message displayed will be like the following:

```
*13.32.56 JOBxxxxx * The following MQ subsystems are active:  
  *MQS1, MQS2, MQS1, CSQ1, CQS2, CSQ3, DEV1, DEV2,  
  *PROD  
*13.32.56 JOBxxxxx *72 Enter subsystem name or Quit
```

Valid responses are: (in all cases the reply should be prefixed with the WTOR message number

**QUIT**

This response will result in the program terminating without any further action. All outstanding messages will be set to roll off the console.

**END**

This has the same effect as QUIT.

**XXXX**

(where 'XXXX' is a subsystem name listed in the WTO)

This response will cause the replied subsystem name to have the desired command issued for it. i.e., %XXXX STOP QMGR.

### 3.4 Return (Condition) Codes

Possible condition codes and their meanings and suggested responses are:

#### Condition Code 0

When a value of zero is returned by **ASLSUBCM** it is an indication that the program issued the desired command against the selected subsystem.

#### Condition Code 4

When a condition code of eight is returned, this is an indication that the desired subsystem is already in the desired state when using the NOCHECK DD option.

#### Condition Code 8

When a condition code of eight is returned, this is an indication that the desired subsystem is already in the desired state when using the WTO/WTOR option.

#### Condition Code 12

A condition code of twelve is returned if the subsystem is not defined on the host system.

#### Condition Code 16

A condition code of sixteen is returned if there is no match for the specific type of subsystem.

#### Condition Code 20

A condition code of twenty indicates that **ASLSUBCM** was called with both a STOP and a START DD card.

## 4 Messages

### **ASLSB01E**

**ASLSB01E - Invalid subsystem name. Retry**

#### **Meaning**

The subsystem name entered via the WTOR was invalid.

#### **Corrective Action**

The operator will be re-prompted for the name of the subsystem.

If in doubt QUIT out!

---

### **ASLSB02E**

**ASLSB02E - Invalid run. No STOP or START DD card**

#### **Meaning**

**ASLSUBCM** was attempting to be executed with a NOCHECK DD card but no START or STOP DD card was provided. **ASLSUBCM** will end with a return code of 20.

#### **Corrective Action**

Specify a START or STOP (not both!) DD card in the JCL deck and rerun the job.

---

### **ASLSB03W**

**ASLSB03W - xxxx already started**

#### **Meaning**

An attempt was made to start a subsystem that is already active.

'xxxx' will be replaced by the name of the subsystem that was entered.

#### **Corrective Action**

No action is required. The job will terminate with a return code of 8.

---

**ASLSB04W****ASLSB04W - xxxx already stopped.****Meaning**

An attempt was made to stop a subsystem that is already inactive.

'xxxx' will be replaced by the name of the subsystem that was entered.

**Corrective Action**

No action is required. The job will terminate with a return code of 8.

---

**ASLSB05E****ASLSB05E - Subsystem xxxx not defined on system. RC=12****Meaning**

The subsystems requested was not found on the system.

'xxxx' will be replaced by the name of the subsystem that was entered.

**Corrective Action**

Enter the name of a valid subsystem.

---

**ASLSB06E****ASLSB06E - No applicable subsystems. RC=16****Meaning**

There were no subsystems matching the type of subsystem that **ASLSUBCM** is coded to search for (by default those will be MQ subsystems)

**Corrective Action**

If you need to search for a different type of subsystem you will need to change the program accordingly.

---

**ASLSB07E****ASLSB07E - Invalid parameter length. Abend S0C3****Meaning**

The parameter passed to **ASLSUBCM** was not 4 characters long.

**Corrective Action**

Correct the parameter and ensure that it is exactly 4 characters in length, then rerun the job.

---

**ASLSB08E****ASLSB08E - Storage obtain failed. Contact site support staff****Meaning**

**ASLSUBCM** was unable to obtain the storage required for the storage subsystem table. The amount of storage required is calculated as ten bytes per subsystem.

**Corrective Action**

Increase the region size for the job and then rerun it.

---

**ASLSB09E****ASLSB09E - xxxx found where SSCT should be****Meaning**

**ASLSUBCM** detected that there was a different value in the SSCT other than SSCT.

The value 'xxxx' will be replaced by the value detected.

The job will terminate with an S0C3.

**Corrective Action**

Contact your site support staff.

---

**ASLSB99E**

**ASLSB99E - Program abend S0C3**

**Meaning**

This message is issued whenever **ASLSUBCM** detects a fatal error.

The job will terminate with an S0C3.

**Corrective Action**

Contact your site support staff.

---

## 5 Summary of Amendments

Date	Version	Fix Id.	Comment
23 <sup>rd</sup> November 2023	3.1	n/a	Free use release version.
26 <sup>th</sup> October 2017	3.0	n/a	Changed message id to standard format.
24 <sup>th</sup> October 2017	3.0	n/a	Ownership transferred to Abbydale Systems LLC.
7 <sup>th</sup> July 2006	2.2	n/a	Messages changed to add message id.
5 <sup>th</sup> July 2006	2.1	n/a	Added STOP, START DB2, DD card support.
28 <sup>th</sup> September 2005	2.0	n/a	Added NOCHECK DD card support.
23 <sup>th</sup> April 1999	1.0	n/a	Initial Program written

## **Obtaining Support**

Support for, comments about and suggestions for enhancements for this product can be obtained from our website :

[www.abbydalesystems.com](http://www.abbydalesystems.com)

or by emailing us at

[support@abbydalesystems.com](mailto:support@abbydalesystems.com)

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