

## Technical Document

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**Document Title:** Modifying QDSIGNON and Getting the Message Across (Part 1)  
**Category:** Hints, Tips & FAQ  
**Functional Area:** Operating System  
**OS/400 Release:** v4r3 and above

### Document Description:

Every so often as you flick through the AS400 and iSeries trade magazines, or browse through the FAQ's and bulletin boards on the internet you will come across a tip reminding you that it is possible to modify the layout of the AS400 or iSeries sign-on display.

My usual recommendation is to "remove" the, in my opinion, superfluous input fields for the current library, menu and program/procedure and to use the space for presenting system news and announcements to our users as can be seen from the screen shot below. In addition I also recommend adding a support line number for your users and a "legal" warning to discourage unauthorised access to your system.

```
Astradyne (UK) Limited
      Help-Desk
Tel: +44-1252-400955
Fax: +44-1252-400956
      System . . . . . : MERCURY
      Subsystem . . . . : QINTER
      Display . . . . . : QPADEV0019

      User . . . . . _____
      Password . . . . .

+++++++ AS/400 SYSTEM NEWS +++ 07 APRIL, 2003 +++ AS/400 SYSTEM NEWS ++++++
                          FASCINATING FACT

No.68 - A snail can sleep for three years.

+++++++ AS/400 SYSTEM NEWS +++ 07 APRIL, 2003 +++ AS/400 SYSTEM NEWS ++++++
~~~~~

WARNING
You are attempting to access a private computer system.  If you have not been
authorised to access this system you should not proceed any further.

(C) COPYRIGHT IBM CORP. 1980, 2000.
```

Figure 1: Example sign-on screen display with changes implemented

In this series of articles I will be showing you how to create an automated system news and announcement utility that will help to keep your users aware of important system events and really get the message across.

## Changing the Sign-On Display

The first thing that we need to do is to customise the sign-on display so that it fits our needs. The source for the sign-on display can be found in source file QDDSSRC in library QGPL and is stored in source member QDSIGNON.

The first thing to do is to copy the source member QDSIGNON to another location for editing and for use. In our shop we have a library that sits **above** QSYS in the system library list, and this holds all system wide utilities, replacement commands, etc. Over the following pages, you will need to replace each occurrence of "library\_name" with the name of the library you use at your installation.

To copy the source file from QGPL to your own library, use the CPYF (Copy File) command:

```
CPYF FROMFILE(QGPL/QDDSSRC) TOFILE(library_name/QDDSSRC) FROMMBR(QDSIGNON)
MBROPT(*ADD)
```

I'm assuming here that you don't already have a version of QDSIGNON in the library you're copying to. If you do, the MBROPT(\*ADD) parameter will generate an exception error and you should determine whether to change the existing member or not. You may want to specify a new member name and should add the TOMBR parameter to the above statement as follows:

```
CPYF FROMFILE(QGPL/QDDSSRC) TOFILE(library_name/QDDSSRC) FROMMBR(QDSIGNON)
TOMBR (new_member) MBROPT(*ADD)
```

Now you have a copy of the source, it's time to make some changes. Figure 2, below, shows the modified version of source member QDSIGNON. The important thing to remember when modifying QDSIGNON is that **under no circumstances should you remove any existing fields from the source**. In other words, even though we don't want to have access to the PROGRAM, MENU and CURLIB fields we should not comment them out or delete the statements from the source member. Instead you have to relocate them and set their Non-Display and Protected display attributes.

So, first, change the "Sign-On" title on line 1 of the display to your company name or some other identifying text. It's not strictly necessary, but can be especially useful where you have multiple servers performing different functions.

A				DSPSIZ(24 80 *DS3)
A*				
A	R	SIGNON		
A				CLEAR
A				BLINK
A			1	30'Astradyne (UK) Limited'
A				DSPATR(HI)
A			2	48'System . . . . . :'
A		SYSNAME	8A	O 2 70
A			3	48'Subsystem . . . . . :'
A		SBSNAME	10A	O 3 70
A			4	48'Display . . . . . :'
A		DEVNAME	10A	O 4 70
A			6	17'User . . . . . '
A		USERID	10A	B 6 53
A	01		7	17'Password . . . . . '
A	01	PASSWRD	10A	I 7 53DSPATR(ND)
A****			8	17'Program/procedure . . . . . '

```

A          PROGRAM          10A B 8 18CHECK(LC)
A          DSPATR(ND)
A          DSPATR(PR)
A****          9 17'Menu . . . . . '
A          MENU            10A B 8 38CHECK(LC)
A          DSPATR(PR)
A****          10 17'Current library . . . . . '
A          DSPATR(ND)
A          CURLIB          10A B 8 58CHECK(LC)
A          DSPATR(PR)
A          DSPATR(ND)
A 02          QSNERROR      80A O 24 1DSPATR(HI)
A          COPYRIGHT      40A O 24 40DSPATR(HI)
A          UBUFFER        128A H
A          HDESK1         32A O 2 8MSGID(SGN 0016 *LIBL/AUKMSGF)
A          HDESK2         32A O 3 2MSGID(SGN 0017 *LIBL/AUKMSGF)
A          HDESK3         32A O 4 2MSGID(SGN 0018 *LIBL/AUKMSGF)
A          SGN000         78A O 9 2MSGID(SGN 0000 *LIBL/AUKMSGF)
A          DSPATR(HI)
A          SGN001         78A O 10 2MSGID(SGN 0001 *LIBL/AUKMSGF)
A          DSPATR(HI)
A          SGN002         78A O 11 2MSGID(SGN 0002 *LIBL/AUKMSGF)
A          SGN003         78A O 12 2MSGID(SGN 0003 *LIBL/AUKMSGF)
A          SGN004         78A O 13 2MSGID(SGN 0004 *LIBL/AUKMSGF)
A          SGN005         78A O 14 2MSGID(SGN 0005 *LIBL/AUKMSGF)
A          SGN006         78A O 15 2MSGID(SGN 0006 *LIBL/AUKMSGF)
A          SGN007         78  O 16 2MSGID(SGN 0007 *LIBL/AUKMSGF)
A          SGN999         78A O 17 2MSGID(SGN 9999 *LIBL/AUKMSGF)
A          DSPATR(HI)
A          WARN01         78  O 19 2MSGID(SGN 0010 *LIBL/AUKMSGF)
A          COLOR(RED)
A          WARN02         78  O 20 2MSGID(SGN 0011 *LIBL/AUKMSGF)
A          WARN03         78  O 21 2MSGID(SGN 0012 *LIBL/AUKMSGF)

```

Figure 2: QDSIGNON Source Member

The second change to make is to remove the label text for the PROGRAM, MENU and CURLIB fields so that we can reclaim the space. As these are constants they won't affect the I/O buffer so it is safe to remove the statements from the source member. Next, add DSPATR(ND) and DSPATR(PR) attributes to each of the PROGRAM, MENU and CURLIB fields, and move them all to line 8 of the display starting in positions 18, 38 and 58 respectively.

The third area to change is to add variables for the additional fields/constants that we want to output to the sign-on display. For this we use MSGID's (as opposed to MSGCON's) to load the required text into the output fields. Using MSGCON's would have required that the display file is recompiled every time the message text changes. MSGID avoids this problem.

The lines added in this area define the Help-Desk contact information, an announcement/notice area and a warning against unauthorised access. Once the changes have been made save the source, but don't compile just yet - we've other things to do first.

## Creating the Message File

Before compiling the QDSIGNON display file we should create the message file and configure the message texts that are going to be used on the sign-on display. To create the message file, use the CRTMSGF (Create Message File) command from any command line as follows:

```

CRTMSGF MSGF(library_name/AUKMSGF) TEXT('Sign-on Display Announcement Message
File')

```

If you change the message file name from AUKMSGF, don't forget to change it within the QDSIGNON source member and also when running the following commands to create the messages within the message file:

```
ADDLIBLE LIB(library_name) POS(*FIRST)
```

```
ADDMSGD MSGID(SGN0000) MSGF(AUKMSGF) MSG(' _____  
_____')
```

Note, there are 78 underline characters in the above MSG parameter.

```
ADDMSGD MSGID(SGN0001) MSGF(AUKMSGF) MSG(' +++++++ AS/400 SYSTEM NEWS +++ 07 APRIL,  
2003 +++ AS/400 SYSTEM NEWS +++++++')
```

```
ADDMSGD MSGID(SGN0002) MSGF(AUKMSGF) MSG(' FASCINATING FACT')
```

```
ADDMSGD MSGID(SGN0003) MSGF(AUKMSGF) MSG(' ')
```

```
ADDMSGD MSGID(SGN0004) MSGF(AUKMSGF) MSG(' No. 69 - The electric chair was invented  
by a dentist.')
```

```
ADDMSGD MSGID(SGN0005) MSGF(AUKMSGF) MSG(' ')
```

```
ADDMSGD MSGID(SGN0006) MSGF(AUKMSGF) MSG(' ')
```

```
ADDMSGD MSGID(SGN0001) MSGF(AUKMSGF) MSG(' +++++++ AS/400 SYSTEM NEWS +++ 07 APRIL,  
2003 +++ AS/400 SYSTEM NEWS +++++++')
```

```
ADDMSGD MSGID(SGN0010) MSGF(AUKMSGF) MSG('WARNING')
```

```
ADDMSGD MSGID(SGN0011) MSGF(AUKMSGF) MSG('You are attempting to access a private co  
mputer system. If you have not been')
```

```
ADDMSGD MSGID(SGN0012) MSGF(AUKMSGF) MSG('authorized to access this system you shou  
ld not proceed any further.')
```

```
ADDMSGD MSGID(SGN0016) MSGF(AUKMSGF) MSG('Help-Desk')
```

```
ADDMSGD MSGID(SGN0017) MSGF(AUKMSGF) MSG('Tel: +44-1252-400955')
```

```
ADDMSGD MSGID(SGN0018) MSGF(AUKMSGF) MSG('Fax: +44-1252-400956')
```

```
ADDMSGD MSGID(SGN0000) MSGF(AUKMSGF) MSG(' ~~~~~  
~~~~~')
```

Now that the message file has been created and the latest announcement has been added you can compile the sign-on display source member, QDSIGNON.

## Passing the Message

Finally, for this instalment anyway, you're message file has been created, you're version of QDSIGNON has been changed and compiled, there's only one more thing left to do - activate the new sign-on display.

To activate the new sign-on display, you have to assign it to an interactive subsystem, e.g. QINTER, QCTL, etc, and you can do this using the Change Subscription Description (CHGSBSD) command:

```
CHGSBSD SBSD(QINTER) SGNDSPF(library_name/QDSIGNON)
```

Note, however, that the sign-on display will not become active until the subsystem has been ended and re-started.

Before we finish, a word of caution. Don't change the Sign-on Display File assigned to your controlling subsystem (usually QCTL), as the system console will usually sign into the controlling subsystem it is a wise precaution to keep at least one terminal available with the option to specify a program or procedure at sign-on time. I have seen situations where a bug has been introduced to a system wide initial program and the ability to change the initial program at sign-on time was needed to allow access to the system.

That's it for this instalment, you can now change your system announcements and notices at will simply editing the message file using the WRKMSGF (Work with Message File) command. In the next article we will be creating a utility to edit the message descriptions as an alternative to the WRKMSGF command, allowing us to incorporate display attributes and colour in the body of the message.