

IBC233 - System i Business Computing

Week 9 : Menus, Security and Report Writer

Agenda

- ▶ Menus
- ▶ Security
- ▶ Report Designer

To Create a Menu...

- ▶ STRSDA - Start SDA, Option 2- Design a Menu
- ▶ Enter Source File name and menu name
- ▶ Work with menu image and commands = Y
- ▶ Specify constants and field attributes
- ▶ Press F10 and enter commands
- ▶ exit SDA and save

SDA-Created Menus

► Menus consist of 3 parts:

- the screen layout (the display file) - *FILE
- the Commands (stored in a Message file with an object type of *MSGF)
- the Menu that ties it all together. (an object type of *MENU). Source for the menu is stored, by convention in the source physical file, QDDSSRC.
- Therefore, 3 objects and 2 source members are created.

Testing Menus

► GO menu_name

e.g. GO STUMNU

Remember!

- ▶ Enclose constants in quotations
- ▶ **Do NOT use the Backspace, Insert or Delete keys** when designing your screen!!!
- ▶ Use the arrow keys or mouse to move around
- ▶ If it's really bad, delete the field and start over!

SDA Demonstration



System i Security

- ▶ To use an object, you must have authority to it.
- ▶ Having authority to a library (*lib object) does not automatically give you authority to the objects in the library.
- ▶ **You must have authority to a library before you can use objects** in a library even if you have authority to those objects.

Who has Authority?

- When an object is created, it automatically has 2 authorised users:
 - The owner
 - Everybody else i.e. *PUBLIC

Pre-Defined Object Authorities

- ▶ ***ALL**: the user can do almost anything to the object.
- ▶ ***CHANGE**: operational authority, data authorities
- ▶ ***USE**: the user can use the object but not change it
- ▶ ***EXCLUDE**: nothing is permitted

How Do You give others Authority to Your Objects?

- ▶ **GRTOBJAUT**: Grant object authority
- ▶ **RVKOBJAUT**: Revoke Object authority
- ▶ **EDTOBJAUT**: Edit object authority
- ▶ e.g. to allow instructor to read/run your programs:

```
GRTOBJAUT OBJ(DT233C01/*ALL) OBJTYPE(*ALL) USER(WSONG)
```

GRTOBJAUT-grant object authority

- ▶ Allows you to grant authority to one or more objects in a library
- ▶ can specify individual users or an authorization list

Remember, you must also give authority to library where the object is stored.

EDTOBJAUT-edit object authority

- ▶ An all-encompassing command
 - Specify individual authorities
 - Specify Group Profile authorities
 - Specify Authorization List authorities
 - *PUBLIC is everyone else
- ▶ **EA** is the PDM short form option

RVKOBJAUT-revoke object authority

- ▶ Allows you to revoke authority from one or more objects in a library
- ▶ can specify individual users or an authorization list
- ▶ You must revoke the authority that was given in the first place e.g. if * change authority was given, then *change authority must be revoked (**applies to individual users, not lists**)

Security

► Each object has 2 types of authorities:

- **object authorities**
- **data authorities**:

data can be the information in a physical file, the objects in a library, the spool files in an output queue, messages in a message queue, etc

Object Authorities

- ▶ **Opr**: look at object desc; do whatever data authority permits.
- ▶ **Mgt**: Move, rename, crtduobj, grtobjaut, add members
- ▶ **Exist**: delete, save and restore operations
- ▶ **Alter**: add, clear, change file attributes, chgpf
- ▶ **Ref**: specify the object as parent file

Data Authorities

- ▶ **Read**
- ▶ **Add**
- ▶ **Update**
- ▶ **Delete**
- ▶ **Execute** e.g. a pgm, a qrydfn, a dfu

An Authorization List

- ▶ A Security object which lists users and their respective authorities.
- ▶ This list can be used to grant the users on the list, the authority listed, to a particular object or objects.
- ▶ For example, if **LAURIN** is on an authorization list with ***all** authority, then **LAURIN** will have ***all** authority to any object secured by the list.
- ▶ Helpful for authorizing a lot of users in one easy step. E.g. IBCPRF

Group Profile

- ▶ Not as flexible as an authorization list
- ▶ Step1: create a User Profile
- ▶ Step2: change all user profiles in the group to reference the first user profile
- ▶ Step3: give object and data authority to the first user profile and everyone in the group gets the same authority

Authorization Hierarchy

- ▶ Owner
- ▶ Explicit Authority
- ▶ Authorization List
- ▶ Group Profile
- ▶ *PUBLIC

Special Authorities - Commands

- ▶ Gives authorities to specific classes of commands

Special Authorizations

Special Authorization	Needed for
*ALLOBJ	User Profile has authority to all objects on the system
*AUDIT	User Profile has authority to view database journals
*JOBCTL	User Profile has authority to manage jobs
*SAVSYS	User Profile has authority to backup and restore
*IOSYSCFG	User Profile has IO configurations authority
*SECADM	User Profile can manage User Profiles
*SERVICE	User Profile has authority to service the operating system
*SPLCTL	User Profile has spool control

Report Designer

Very Similar to Screen Designer!

Report Designer

- ▶ To create the print file, add a member to QDDSSRC in your library. Make sure the TYPE is **PRTF**.
- ▶ SPACEB – Space Before
 - SPACEB(1) - specifies that the printer device is to space 1 line before it prints the next line or lines.

Thank You!