

# IBC233 - System i Business Computing

## Lecture 11: Calling Programs

# Agenda

## ► Calling Programs

# OPM (static) Call

## ► CALL

- Parameters:

PGM

PARM

# How it works

- When the call statement is executed:
  - Your authority to the program object is checked
  - Do you have access to all the resources required?
  - Gather resources
  - Program opened

# Passing Parameters in CL (OPM)

Call program1 ('test' 'new')

then program 1 must have a pgm statement  
that looks like this:

pgm (&parm1 &parm2)

dcl &parm1 \*char 10

dcl &parm2 \*char 5

# Passing Parameters in CL (OPM)

pgm

```
dcl &var1 *char 6 value 'IBC233'
```

```
call pgm2 &var1
```

```
  call pgm(pgm3) parm(&var1)
```

```
endpgm
```

Pgm2 and pgm3 must have a pgm statement similar to this:

```
pgm parm(&parm1)
```

# Passing Parameters CL to RPG (OPM)

```
pgm
```

```
  call pgm2 ('RPG')
```

```
endpgm
```

RPG program must have the fixed format C spec code:

F1	Operation	F2	Result
*entry	plist		
	parm		varName

# ILE (dynamic) Call

## ► CALLPRC

Parameters:

PRC

PARM

RTNVAL

# How it works

- ▶ When the application is created, authority to modules is checked and entire application is bound
- ▶ When application is called
  - all resources are allocated
  - entire application is opened

# Passing Parameters in CL (ILE)

Call appl1 ('test' 'new')

then the first \*module in the application must  
must have a pgm statement like this:

pgm (&parm1 &parm2)

dcl &parm1 \*char 10

dcl &parm2 \*char 5

# Passing Parameters in CL (ILE)

```
pgm
```

```
  dcl &var1 *char 6 value 'IBC233'
```

```
  call pgm2 &var1
```

```
    callprc (mod3) parm(&var1)
```

```
endpgm
```

mod2 and mod3 must have a pgm statement similar to this:

```
pgm &parm1
```

# Passing Parameters CL to RPG (ILE)

```
pgm
```

```
  callprc pgm2 ('RPG')
```

```
endpgm
```

RPG procedure must have the fixed format C spec code:

F1

\*entry

Operation

plist

parm

F2

Result

varName

# Advantages of OPM

- ▶ Don't have to have all parts of the application done to test.
- ▶ Parts of the application can be changed without affecting the entire application

# Disadvantages of OPM

- Integrated Language not supported

# Advantages of ILE

- ▶ Integrated Language Support
  - Best language for the task
- ▶ You don't have to pass all parameters to the program – previous values will be used

# Disadvantages of ILE

- All modules must be in place to test application
- Version Control