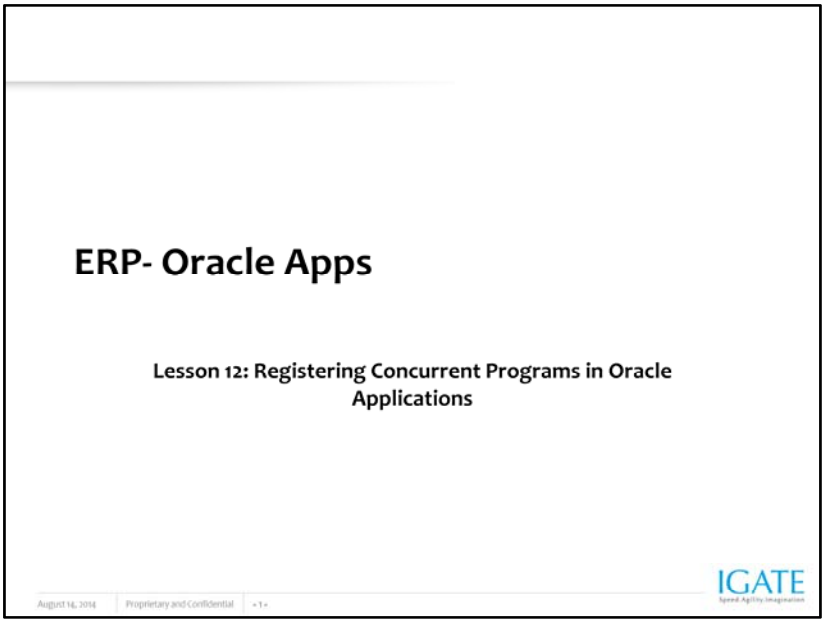
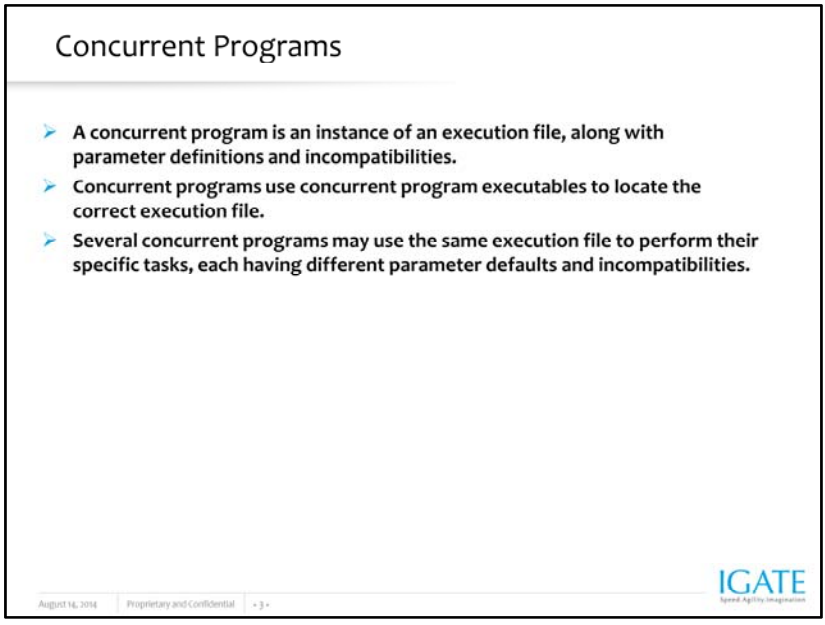
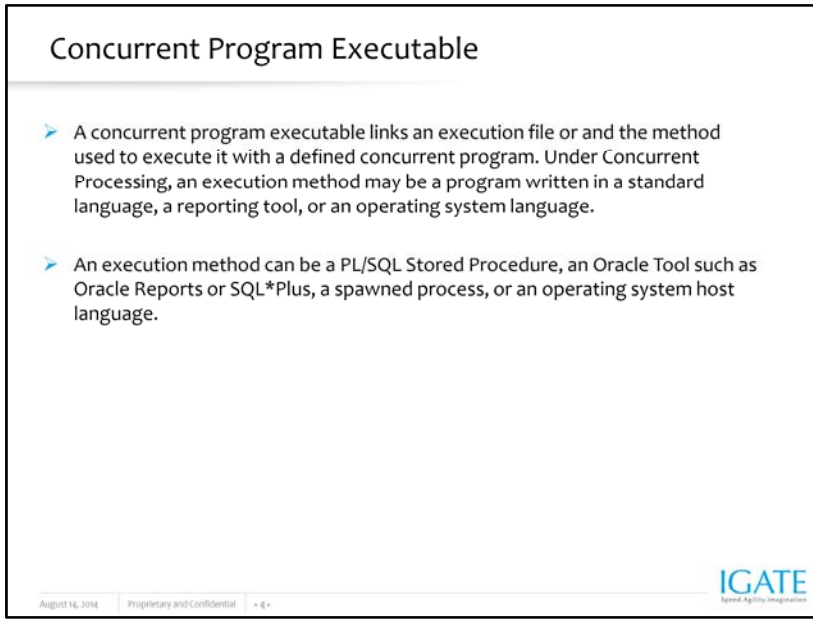

ERP- Oracle Apps
Lesson 12: Registering Concurrent Programs in Oracle Applications
August 14, 2014
Proprietary and Confidential
IGATE

Lesson Objectives

- **To understand the following**
  - Concurrent Programs
  - Steps Involved in registering a Concurrent Program
    - Executable Registration
    - Attaching Executable to the Concurrent Program
    - Attaching Concurrent Program to the Request Group

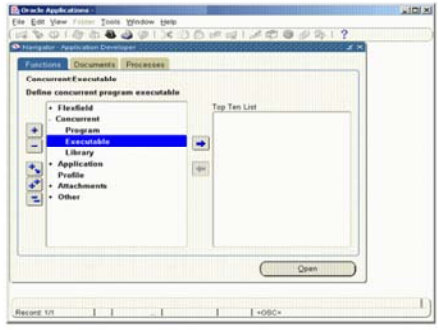
IGATE
Speed. Agility. Imagination.


Concurrent Programs
A concurrent program is an instance of an execution file, along with parameter definitions and incompatibilities.
Concurrent programs use concurrent program executables to locate the correct execution file.
Several concurrent programs may use the same execution file to perform their specific tasks, each having different parameter defaults and incompatibilities.
August 14, 2014
Proprietary and Confidential
IGATE


Concurrent Program Executable
A concurrent program executable links an execution file or and the method used to execute it with a defined concurrent program. Under Concurrent Processing, an execution method may be a program written in a standard language, a reporting tool, or an operating system language.
An execution method can be a PL/SQL Stored Procedure, an Oracle Tool such as Oracle Reports or SQL*Plus, a spawned process, or an operating system host language.
August 14, 2014
Proprietary and Confidential
IGATE

Steps to Create a Concurrent Program

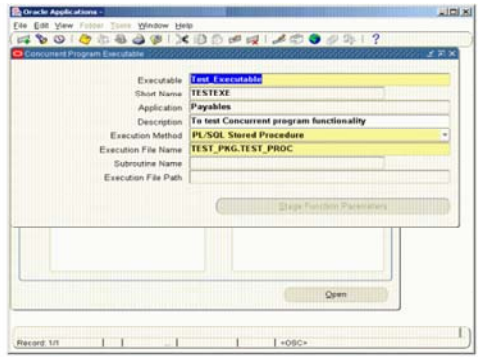
- **Executable: To open the Executable form, follow the below mentioned navigation path:**
- **Application Developer > Concurrent > Executable**



IGATE
Speed. Agility. Imagination.

Steps to Create a Concurrent Program

- Executable form: To define an executable select Program under concurrent from Application Developer responsibility



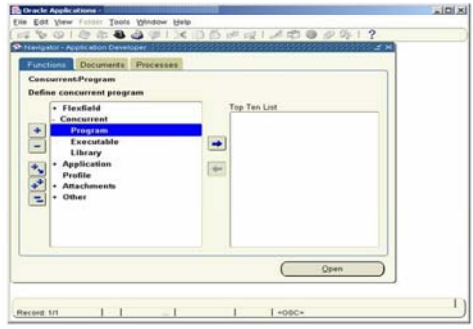
Field and Description
Executable - Enter executable name here. Enter any user friendly name.
Short Name - Enter short name for your executable. This is used for mapping the executable with the concurrent program. Usually executable name are of 8 characters.
Application - Give the application to which the executable belongs to. E.g. you want some program to run from oracle payables then account payables should be entered as application name.
Description - Give the brief description of the executable in this field.
Execution Method - Here you need to choose the appropriate execution method for your executable.

Oracle Reports – used for the RDF reports
Host – used for shell scripts, basically the language of the host operating system
PL/SQL Stored procedure – used to run the stored procedure through oracle applications
SQL*Loader – used to run the SQL loader programs
SQL*Plus - used to run the anonymous PL/SQL blocks. It will get executed in the same fashion as you are running on SQL Plus.
Java Stored Procedure – The execution file is a Java stored procedure.
Java Concurrent Program – Used for program written in Java.

Spawned – used for c or pro*c Program. Mainly used by standard oracle interfaces.
Perl Concurrent Program – used for programs written in CGI Perl.
Request Set Stage Function – PL/SQL stored function that can be used to calculate the completion statuses of request set stages.
Immediate – execution file is a program written to run as subroutine of the concurrent manager. Oracle doesn't recommend use of this executable type.
Executable File name – This should contain the name of the executable file. In case of PL/SQL Stored procedure or Java Stored Procedure it should be the fully defined name of the stored procedure.
Subroutine Name – This field is only used when executable type is spawned or immediate.
Multi-Language function – execution file is an MLS function that supports running concurrent program in multiple languages.

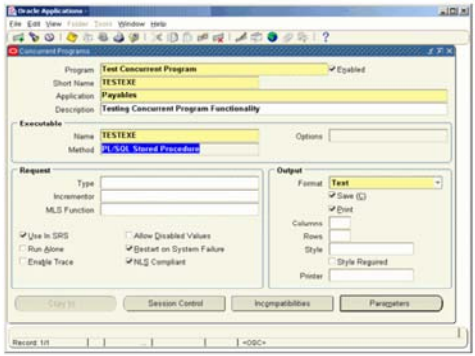
Steps to Create a Concurrent Program

- **Concurrent Program: Select Program under Concurrent from Application Developer responsibility using the navigation: Application Developer > Concurrent > Program**



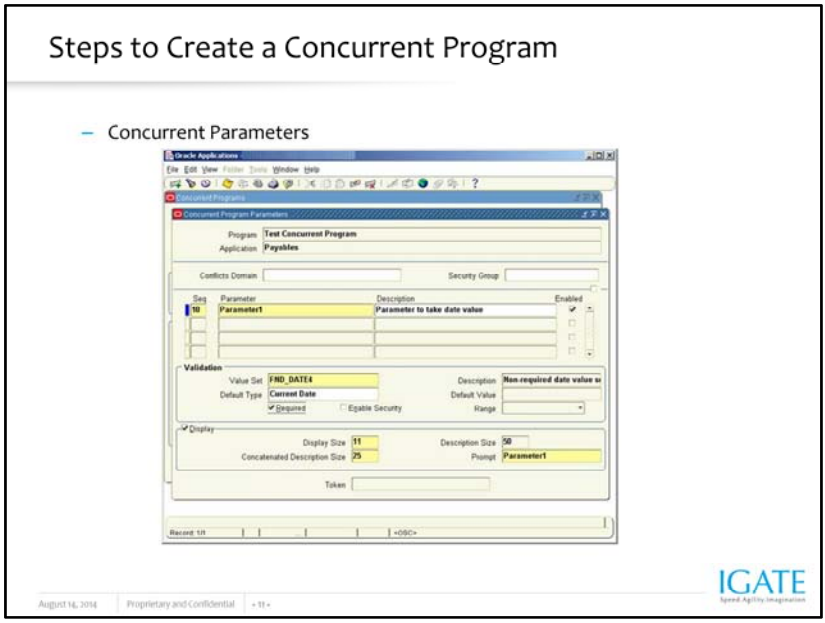
Steps to Create a Concurrent Program

- Concurrent Program Form: Enter a program name and add the name of the executable. The executable should already be defined.



Field and Description
Program – Give user friendly name for your concurrent program. This name will be displayed in Requests submission screen while submitting the requests.
Short Name – Give short name for concurrent program. This is used within the database tables in oracle applications. It's a common practice to have the Short name same for the executable and the concurrent program.
Application – Give the application to which the concurrent program belongs to. E.g you want some program to run from oracle payables then account payables should be entered as application name.
Description - Give the brief description of the concurrent program.
Executable - Enter the short name of the executable (Defined in Executables Screen) you want to attach to this concurrent program.
Method - will be defaulted once you enter executable short name
Options - will be defaulted once you enter executable short name
Normally default values are given for the other fields. Following is the significance of these fields.
Request Type – Concurrent program can be associated to a predefined request type so that only few concurrent managers can run the program.
Incrementor – To be used by Oracle only.
MLS Function - This feature allows the program to be submitted once by the user but runs it in the multiple languages.
Use In SRS – Only when this check box is checked the Concurrent Program would be available in Standard Request Submission (SRS) through the request group.
Allow Disable Value – This will allow the disabled values in the value sets to be used while entering the values of the parameters in the Concurrent Program.
Run Alone – Indicates that program is incompatible with all other concurrent programs and should be run alone.

Enable Trace – This will enable the SQL trace for the concurrent program and will generate the trace file when concurrent program is run. Only used in development environments to check the performance of the concurrent program.
Restart on system Failure – This option is used to indicate that concurrent program should automatically be started when concurrent manager is restored after the system failure.
NLS Compliant – This box is checked if the program allows for a user to submit request of the program that will reflect a language and territory that are different from the language and territory that the users are operating in.
Output Format – Format in which output should be printed. Possible format values are
HTML
PDF
TEXT
PS (Post Script)
PCL(HP's Printer Control Language)
SAVE – Check to indicate that output should be automatically saved in an operating system file.
PRINT – Whether you want the output to be sent to printer for printing.
Column / Rows – Column and Row length of the concurrent program output. Oracle Applications uses this information to decide the print style.
Style Required – Print Style
Printer – A particular printer on which output should be sent.



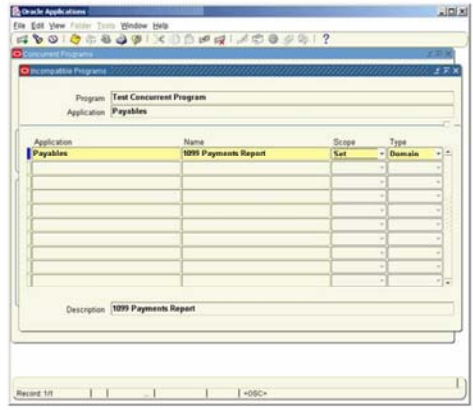
Field and Description
Program – will be defaulted from Concurrent Program
Application – will be defaulted from Concurrent Program
Conflicts Domain - Enter the parameter which will hold the value of the conflict domain of the program.
Security Group - This field is for HRMS security only.
Seq – Enter sequence number for the parameter
Parameter – name of the parameter, will be displayed in parameter entry screen
Description – description about the usage of the parameter
Enabled – check box to enable or disable the parameter. Disable a parameter when you don't want to use it.
Value set – enter the name of the value set which you want to use to validate the value enter in the parameter field.
Description – will be defaulted from value set definition
Default Type – choose the default type for the default value of the parameter.
Possible default types are

Constant : The default value can be any literal value.
Profile : The default value is the current value in the user profile option defined in the Default Value field. Use the profile option name, not the end–user name. You do not need to include $PROFILE$.
SQL Statement : The default value is determined by the SQL statement you defined in the Default Value field.
Segment : The default value is the value entered in a prior segment of the same parameter window.

Display size – Enter the field length in characters for this parameter. The user sees and fills in the field in the Parameters window of the Submit Requests window.
Token - For a parameter in an Oracle Reports program, the keyword or parameter appears here. The value is case insensitive. For other types of programs, you can skip this field.

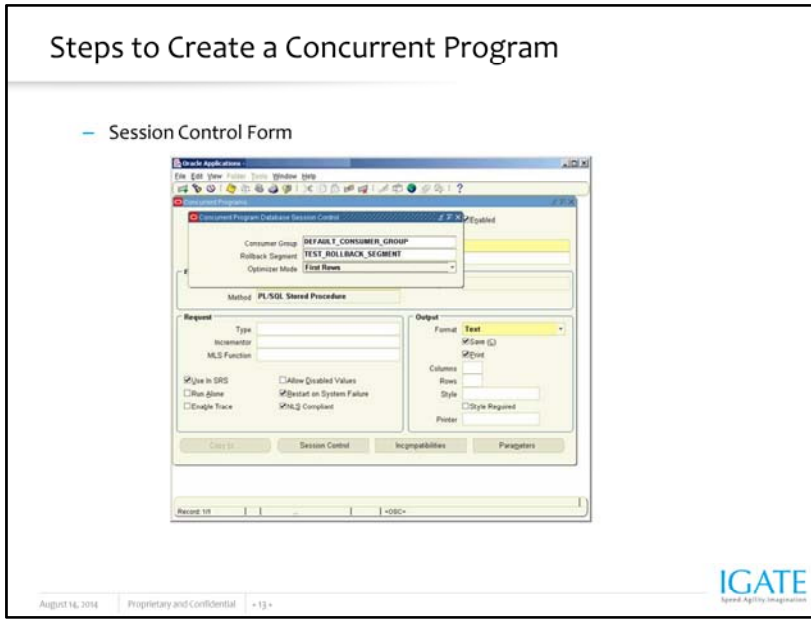
Steps to Create a Concurrent Program

- Incompatibilities Form



IGATE

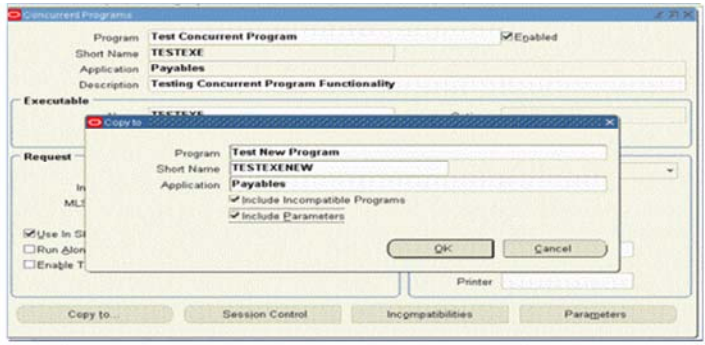
Field and Description
Program – Defaulted from Concurrent Programs Window
Application – Defaulted from Concurrent Programs Window
Application – Application of the concurrent program which is incompatible to the defined concurrent program.
Name – Name of the concurrent program which is incompatible to the defined concurrent program.
Scope – Used to identify if concurrent program is incompatible if the program or also with its child requests.
Type - Enter Domain or Global. If you choose Domain, the incompatibility is resolved at a domain-specific level. If you choose Global, then this concurrent program will be considered globally incompatible with your concurrent program, regardless of which domain it is running in



Field and Description
Consumer Group – resource consumer group of the concurrent program can be specified. A resource consumer group defines a set of users who have similar resource usage requirements. An overall resource plan specifies how resources are distributed among the different resource consumer groups. Resource consumer groups and resource plans provide a method for specifying how to partition processing resources among different users.
Rollback Segment – Rollback segment specified here would be used instead of the default rollback segment. If you specify a rollback segment here, your concurrent program must use the APIs FND_CONCURRENT.AF_COMMIT and FND_CONCURRENT.AF_ROLLBACK to use the specified rollback segment.
Optimizer mode - Optionally specify an optimizer mode. You can choose ALL_ROWS, FIRST_ROWS, Rules, or Choose. You would specify an optimizer mode only for a custom program that may not perform well with the default cost-based optimizer (CBO) and needs tuning. You can use a different optimizer mode until your program is tuned for CBO.

Steps to Create a Concurrent Program

- Copy To Form

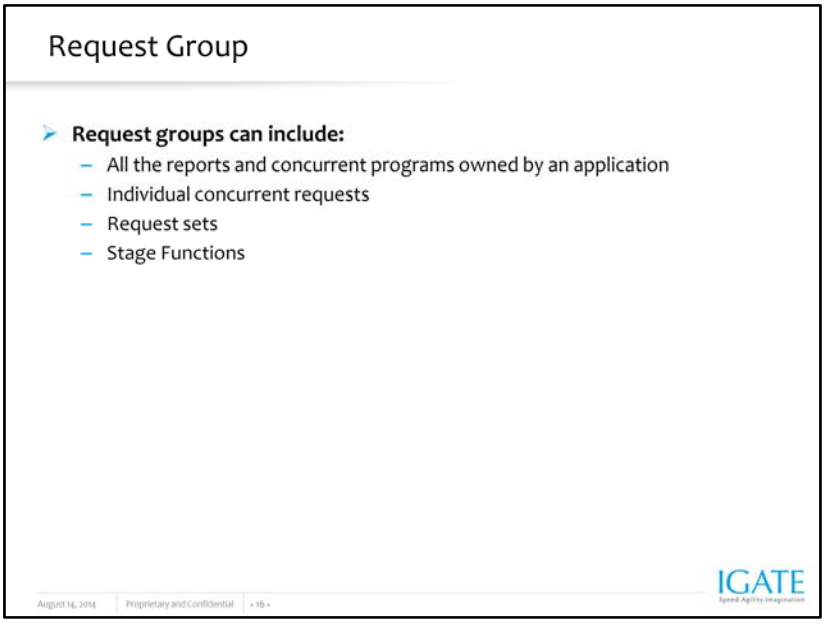


Field and Description
Program – Enter the program name to be copied
Short Name – Short Name of the program to be copied
Application – Application name of the concurrent program to be copied
Include Incompatible programs - Check this box if you want incompatibilities to be copied
Include Parameters – Check this box if you want parameters to be copied.

Steps to Create a Concurrent Program

- **Request Group**
  - A request group is a collection of reports and other concurrent programs. You use request groups to implement security at the responsibility level. Request groups are normally associated with a responsibility, in which case they are referred to as request security groups. Any user of a responsibility has access to the reports in that responsibility's request security group.
  - Additionally, you can define a request group to have an access code. Users must supply this code to access the reports in the coded request group.

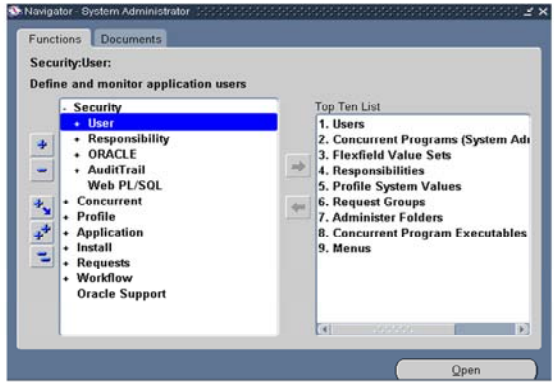
Programs and reports available to a responsibility



Request Group Creation
(N) Security > Responsibility > Request
An application name is required when defining the request set. This application name and the request group name uniquely identify this request set. The application name does not prevent you from assigning reports and report sets from other applications to this group.
For more information see:
(Help) Applied Technology > Oracle Applications System Administration > Request Groups Window.

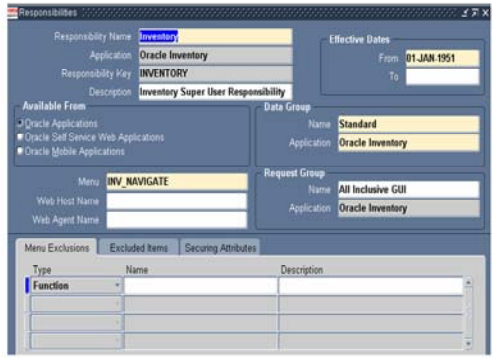
Registering a Concurrent Program

- **Select Responsibility under Security**



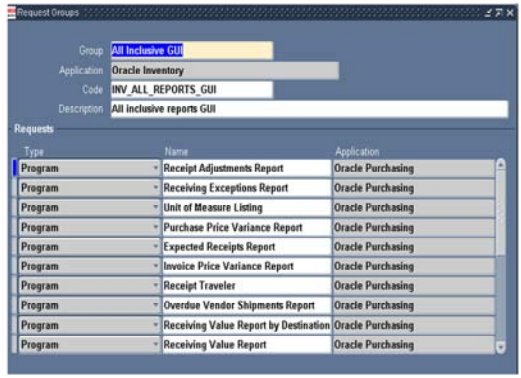
Registering a Concurrent Program

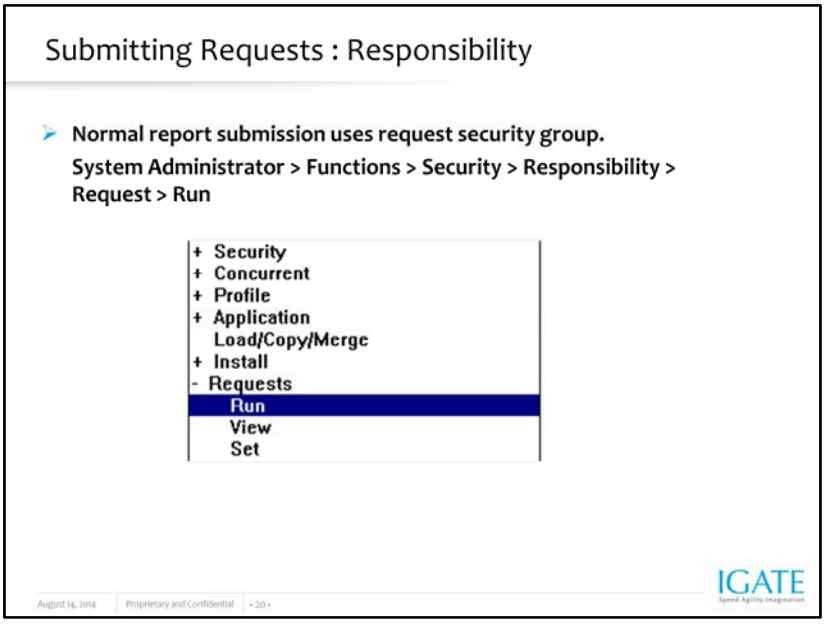
- **Find the request group for the required responsibility**



Registering a Concurrent Program

- Add your program to the Request Group





Responsibility-Based Access

This is the typical way a user submits a report. The menu prompt Run does not pass any arguments to the Submit Requests form when the prompt is chosen.

The list of values includes all the programs in the responsibility's request security group.

Demo

- Demo to register a stored procedure

IGATE
Speed. Agility. Imagination.

Summary

- **In this lesson, we covered:**
  - Concurrent Programs
  - Steps Involved in registering a Concurrent Program
    - Executable Registration
    - Attaching Executable to the Concurrent Program
    - Attaching Concurrent Program to the Request Group

Review Question

- 3. _____ Is a feature that allows you to run a non-interactive, data-dependent function, such as a report or program, simultaneously with online operations.

- 4. List the 4 phases of a concurrent request.
- 5. Programs in a request set can share _____ therefore a _____ needs to be entered only once for multiple programs.