

# What's Cool About the **CONNECT Command** in RACF

Stu Henderson  
5702 Newington Road  
Bethesda, MD 20816

[stu@stuhenderson.com](mailto:stu@stuhenderson.com)  
[www.stuhenderson.com](http://www.stuhenderson.com)  
(301) 229-7187

# AGENDA

2

1. We all know the **CONNECT** command
2. What is in **CONNECT INFO**?
3. Why use **CONNECT INFO**?
4. Summary and Call to Action

# We all know the **CONNECT** command

3

The **CONNECT** command

**CO USER02 GROUP(GROUPA)**

is used to connect a  
User to a Group

# We all know the **CONNECT** command

4

The **REMOVE** command  
(opposite of CONNECT)

**RE USER02 GROUP(GROUPA)**

is used to remove a  
User from a Group

# What is in CONNECT INFO?

5

- ❑ User profile has groups the user belongs to
- ❑ Group profile has users in the group

USER02  
Profile

- ...
- Member of: ...

GROUPA  
Profile

- ...
- User Members: ...

# What is in CONNECT INFO?

6

The **CONNECT** command puts  
the group name in User Profile  
and  
the user name in Group Profile

**CO USER02 GROUP(GROUPA)**

USER02  
Profile

- ...
- Member of:  
**GROUPA**

GROUPA  
Profile

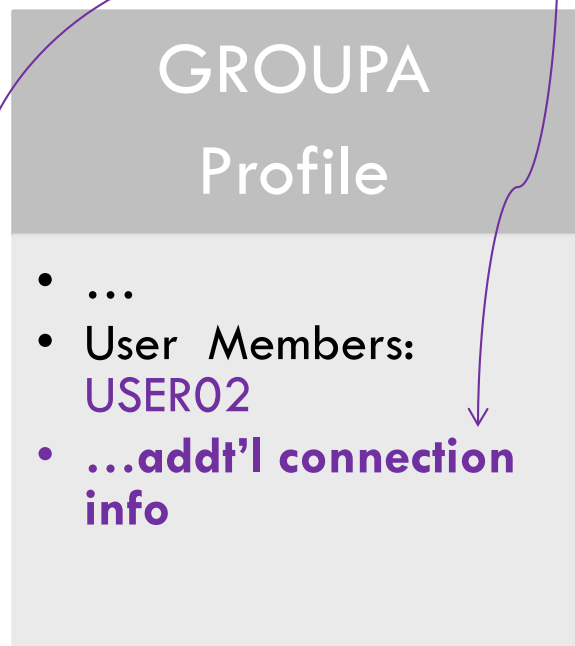
- ...
- User Members:  
**USER02**

# What is in CONNECT INFO?

7

The **CONNECT** command may include additional **connection information** about how the User relates to the Group

CO USER02 GROUP(GROUPA) *...connection info*



# What is in CONNECT INFO?

8

- ✓ UserID and Group Name
- ✓ UACC
- ✓ AUTH
- ✓ Group Attributes, aka Connect Attributes



# What is in CONNECT INFO?

9

## **UACC** in CONNECT INFO

- Safely ignored
- Let it default to NONE
- Stored in ACEE
- Used only for certain resource classes when creating a new profile and you forget to specify the UACC (See DSMON Class Descriptor Table under UACC)

# What is in CONNECT INFO?

10

## **AUTH** in CONNECT INFO

- ❑ **JOIN** (can create new sub-groups under the group, and (with CLAUTH(USER) new userids in the group)
- ❑ **CONNECT** (can connect / remove others to the group)
- ❑ **CREATE** (can create dataset rule with groupname as HLQ)
- ❑ **USE** (just a member)

# What is in CONNECT INFO?

11

## **Group Attributes** in CONNECT INFO

- Any of: SPECIAL, OPERATIONS, AUDIT, REVOKE, GRPACC
- Gives the privilege in the group
- And all the groups it owns
- And all the groups they own...

# What is in CONNECT INFO?

12

## **Group Attributes** in CONNECT INFO

- So in DSMON, Selected User Attribute Report, you see that USER02 has Group-SPECIAL in GROUPE
- You LISTUSER USER02 to see which group(s)
- You find those groups in DSMON, Group Tree Report

# What is in CONNECT INFO?

13

- Find all the groups they own by following down the vertical lines in the Group Tree Report
  
- And the groups they own, and so on

# What is in CONNECT INFO?

14

- ❑ Each group is owned by either a userid or a group. If a group, it must be the superior group, which is connected to it by a vertical line
- ❑ When a group has a name in parentheses to the right of the group name in the Group Tree Report, that's the name of the userid that owns the group
- ❑ When a group is owned by a userid, then the trickle-down stops with the group

# What is in CONNECT INFO?

15

## Two Phases:

1. List all the groups which the group owns, all the groups they own, on down the tree, as long as a group owns a group owns a group
2. List every profile owned by these groups, plus dataset profiles with these as HLQs

That's the scope of the group attribute

# Why use CONNECT INFO?

16

- Delegation of Authority
- Famous Nome-Honolulu Principle
- AUTH gives authority just within the group
- Group-SPECIAL gives authority in the group, and all down the tree from there



# Why use CONNECT INFO?

17

- AUTH is great for RBAC (Role Base Access Control)
- You permit the group where it needs and use AUTH(CONNECT) to let someone else just connect and remove for the group. He can't mess up your permit lists.
- To learn AUTHs greater than USE,  
//S1 EXEC RACFICE,REPORT=UADS

# Group-SPECIAL

18

- Is like having your userid be the owner of a profile: it lets you alter or delete it
- For the Help Desk, better to use FACILITY class rules named IRR.PASSWORD... to delegate the ability to administer passwords and revoke/resume

# Summary / Call to Action

19

- Don't let your RACF implementation permit things you don't understand
- Map out your delegation of authority: who has AUTH above USE, who has group-attributes, who has CLAUTH, who has SPECIAL
- Then you know how to make it secure
- If not you, then who?

# For More Information

20

RACF User News (back issues & subscribe)

<http://www.stuhenderson.com/Newsletters-Archive.html>

Articles on mainframe security and audit

<http://www.stuhenderson.com/Articles-Archive.html>

Thanks for Your Kind Attention.

Questions to Stu Henderson

(301) 229-7187

[stu@stuhenderson.com](mailto:stu@stuhenderson.com)

<http://www.stuhenderson.com/>