





TSO/E LOGON: What Are My Options?

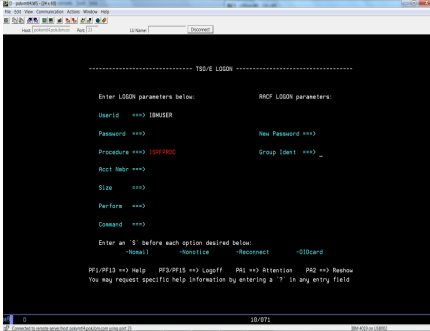

Session 17913
August 10, 2015
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Agenda



- In the beginning ...
- Exits
- Fullscreen vs. Line Mode
- UADS and RACF Defined Users
- Mixed Case Passwords
- Password Phrases
- VERIFYAPPL
- LOGONHERE
-  Password Preprompting (Coming Soon)

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In The Beginning...



- LOGON command
 - Line Mode
 - All parameters needed to be specified
 - Some prompting for values not specified

```
>> _LOGON_user_identity_____>
      |_/password_____|
      |_/new_password_|

>
|_ACCT(account)_| |_PROC(procedure_name)_| |_SIZE(integer)_|
>
|_NOTICES_| |_MAIL_|
> |_/NONOTICES_| |_/NOMAIL_| |_/PERFORM(value)_| |_/RECONNECT_|
|_/NORECONNECT_|
>
>|_SECLABEL(security_label)_| |_GROUP(name)_| |_OIDCARD_|<
```

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Exits - Possible Uses



- IKJEFLD – pre-prompt
 - Supply or change values that users specify on the LOGON command
 - Supply system attributes and user attributes (UPT, PSCB)
 - Provide your own JCL statements
 - Validate the logon information that users enter
 - Display your own logon panel
 - Prevent a user from logging on to TSO/E
- IKJEFLD1 – pre-prompt (authorized)
 - All IKJEFLD uses
 - Supply the first TSO/E command to be executed in the user's session
 - Supply SYSOUT and job classes for the PSCB
 - Supply the primary and secondary language values

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Exits - Possible Uses



- IKJEFLN1 – pre-display
 - Supply information for fields on the logon panel
- IKJEFLN2 – post-display
 - Process fields on the logon panel
 - Validate data on the logon panel
 - Re-prompt for data
 - Display help panels

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Exits - Possible Uses ...



- IKJEFLD3 – post-prompt
 - Examine the JCL statements
 - Modify the JCL statements
 - Provide additional JCL statements
 - Terminate the LOGON command
- IKJEFLD2 – LOGOFF
 - Clean up storage obtained by the logon exit
 - Control re-logons
 - Gather accounting information

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Fullscreen vs. Line Mode



- Fullscreen
 - Most prompting done on panel
 - Prefills info from last LOGON
- Line Mode
 - All info provided in line mode
 - Only prompted for required data
 - No ability to see last LOGON info

```

----- TSO/E LOGON -----

Enter LOGON parameters below:          RACF LOGON parameters:

Userid  <====> ISMUSER                New Password <====>
Password <====>                          Group Ident <====> _
Procedure <====> ISPFPROC
Acct Nbr <====>
Size    <====>
Perfora <====>
Command <====>

Enter an 'S' before each option desired below:
-Noall      -Nonotice    -Reconnect  -Oidcard

PF1/PF13 ==> Help  PF3/PF15 ==> Logoff  PR1 ==> Attention  PR2 ==> Reshow
You may request specific help information by entering a '?' in any entry field
  
```

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UADS and RACF Defined Users



- UADS
 - Administered by ACCOUNT command/subcommands
 - Can set some authorities
 - JCL, OPER, ACCOUNT, MOUNT, RECOVER
- RACF
 - Administered by RACF ADDUSER/ALTUSER commands
 - TSO segment contains previous LOGON information
 - RACF general resource profiles define access rights
 - Additional fields displayed on LOGON panel (e.g. group, seclabel)
 - Recommended data store
 - Keep emergency IDs in UADS (Revoked in RACF) for disaster recovery
- UADS and RACF
 - Basic info stored in RACF
 - Additional info stored in UADS (e.g. proc, acct)

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UADS User



```

account
ACCOUNT
list (IBMUSER)
  IBMUSER USER ATTRIBUTES: OPER ACCT JCL NOMOUNT RECOVER
  INSTALLATION ATTRIBUTES, IN HEX: 0000
  MAXSIZE: NOLIM
  USER PROFILE TABLE:
  0038000000000000000000000000000020000001 IBMUSER
  DESTINATION = CENTRAL SITE DEFAULT
  HOLD MSGCLASS= (DEFAULT)
  JOB CLASS = (DEFAULT)
  MESSAGE CLASS= (DEFAULT)
  SYSOUT CLASS = (DEFAULT)
  NO PERFORMANCE GROUPS

(*)
(*)
  IKJACCNT PROCSIZE= 4096K, UNIT NAME= SYSALLDA

```

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RACF User



```

lu ibmuser tso
USER=IBMUSER NAME=: OWNER=IBMUSER CREATED=90.317
DEFAULT-GROUP=SYS1 PASSDATE=93.056 PASS-INTERVAL=N/A PHRASEDATE=N/A
ATTRIBUTES=SPECIAL OPERATIONS
ATTRIBUTES=AUDITOR
REVOKE DATE=NONE RESUME DATE=NONE
LAST-ACCESS=15.221/09:07:18
CLASS AUTHORIZATIONS=NONE
NO-INSTALLATION-DATA
NO-MODEL-NAME
LOGON ALLOWED (DAYS) (TIME)
-----
ANYDAY ANYTIME
GROUP=SYS1 AUTH=JOIN CONNECT-OWNER=IBMUSER CONNECT-DATE=93.134
CONNECTS= 2,505 UACC=READ LAST-CONNECT=15.221/09:07:18
CONNECT ATTRIBUTES=NONE
REVOKE DATE=NONE RESUME DATE=NONE
SECURITY-LEVEL=NONE SPECIFIED
CATEGORY-AUTHORIZATION
NONE SPECIFIED
SECURITY-LABEL=SYSMULTI
DEFINITION OF THIS SECURITY LABEL IS:
NO INFORMATION IS AVAILABLE

```

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RACF User (cont)



TSO INFORMATION

ACCTNUM= MVS420
PROC= REL5PROC
SIZE= 00050000
MAXSIZE= 00000000
USERDATA= 0000
COMMAND= ispf

User Profile Table (previous LOGON Info) stored, but not listed

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RACF Password Options



- SETROPTS (Set RACF Options)

SETR LIST

.
.
.

PASSWORD PROCESSING OPTIONS:

THE ACTIVE PASSWORD ENCRYPTION ALGORITHM IS KDFAES
PASSWORD CHANGE INTERVAL IS 30 DAYS.
PASSWORD MINIMUM CHANGE INTERVAL IS 1 DAYS.
MIXED CASE PASSWORD SUPPORT IS IN EFFECT
SPECIAL CHARACTERS ARE ALLOWED.
10 GENERATIONS OF PREVIOUS PASSWORDS BEING MAINTAINED.
AFTER 3 CONSECUTIVE UNSUCCESSFUL PASSWORD ATTEMPTS,
A USERID WILL BE REVOKED.
PASSWORD EXPIRATION WARNING LEVEL IS 3 DAYS.
NO INSTALLATION PASSWORD SYNTAX RULES ARE PRESENT.

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Mixed Case Passwords



- Enabled by RACF
 - SETROPTS PASSWORD(MIXEDCASE | NOMIXEDCASE)
- TSO/E honors RACF setting
 - Will roll password to upper case if MIXEDCASE not in effect
 - Otherwise will leave as is
 - RACF will allow mixed case password to “match” upper case password in DB until user defines first mixed case password

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TSO/E Parmlib



- IKJTSOxx member defines TSO/E attributes
- Set/Modified by:
 - PARMLIB user command
PARMLIB U(xx)
 - SET console command
SET IKJTSO=xx
- LOGON statement controls LOGON options

LOGON PASSPHRASE(ON | OFF)
 VERIFYAPPL(ON | OFF)
 LOGONHERE(ON | OFF)
 PASSWORDPREPROMPT(ON | OFF)

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Password Phrases



- Enabled via LOGON Statement in IKJTSOxx
 - LOGON PASSPHRASE(ON | OFF)
- Only applies to Fullscreen LOGON
- A password or password phrase can be used
 - Length determines what was used
 - 1-8 Password
 - >8 Phrase
 - In RACF V2R2 a 'Phrase Only' user can be defined 
- Panel is modified to allow phrases
- If password expired will re-prompt in same field as password
- To change New Password before expiration select option at bottom of panel

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LOGON Panel - Phrase



```

----- TSO/E LOGON -----

Enter LOGON parameters below:                RACF LOGON parameters:

UserId   ==> IBMUSER
Password ==> _
Procedure ==> TSOIRCS1                      Group Ident ==>
Acct Nbr ==>
Size     ==>
Perform  ==>
Command  ==>

Enter an 'S' before each option desired below:
-New Password  -Nomail  -Nonotice  -Reconnect  -OIDcard

PF1/PF13 ==> Help  PF3/PF15 ==> Logoff  PA1 ==> Attention  PA2 ==> Reshow
You may request specific help information by entering a '?' in any entry field
    
```

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VERIFYAPPL



- Enabled via LOGON Statement in IKJTSOxx
 - LOGON VERIFYAPPL(ON | OFF)
- Passes application ID to RACF when verifying user
- Can restrict access to TSO by APPL class profiles
- Can implement that only daily statistics be taken when using TSO

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LOGONHERE



- Enabled via LOGON Statement in IKJTSOxx
 - LOGON LOGONHERE(ON | OFF)
- Make LOGON RECONNECT work even if the user is not disconnected
- Allows LOGON when **IKJ56411I TSOLOGON RECONNECT REJECTED -USERID userid IN USE** is issued otherwise

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Password Preprompting



- Enabled via LOGON Statement in IKJTSOxx
 - LOGON PASSWORDPREPROMPT(ON | OFF)
- Enforces that userid and password entered prior to displaying panel
- Applies to password phrases also
- Will not provide evidence of an existing user if authentication fails
- Ensures that previous logon information is not displayed prior to successful authentication
- Processing occurs after IKJEFLD and IKJEFLD1
 - If other existing exits interrogate/alter Userid or Password in additional processing they may need to be altered before activating
 - Includes RACROUTE REQUEST=VERIFY Exits
- Shipped via PTFs for APAR OA44855 at V1R13, V2R1 and V2R2

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Password Preprompting



```

IKJ26700A ENTER USERID -
|bmuser
Enter Password:
***
-
  
```

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Password Preprompting



```
----- TSO/E LOGON -----  
  
Enter LOGON parameters below:          RACF LOGON parameters:  
Userid ==> IBMUSER                      New Password ==>  
                                           Group Ident ==>  
Procedure ==> RACFR1A  
Acct Nbr ==>  
Size ==>  
Perform ==>  
Command ==>  
  
Enter an 'S' before each option desired below:  
-Nomail          -Nonotice          -Reconnect          -OIDcard  
PF1/PF13 ==> Help  PF2/PF15 ==> Logoff  PA1 ==> Attention  PA2 ==> Reshow  
You may request specific help information by entering a '?' in any entry field
```

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Password Preprompting




```
Enter Password:  
IKJ564741 USERID OR PASSWORD IS INCORRECT OR NOT AUTHORIZED  
*****
```

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Where Have We Been?



- In the beginning ...
- Exits
- Fullscreen vs. Line Mode
- UADS and RACF Defined Users
- Mixed Case Passwords
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- LOGONHERE
-  Password Preprompting

References:

TSO/E Command Reference

TSO/E Customization

TSO/E System Programming Command Reference

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