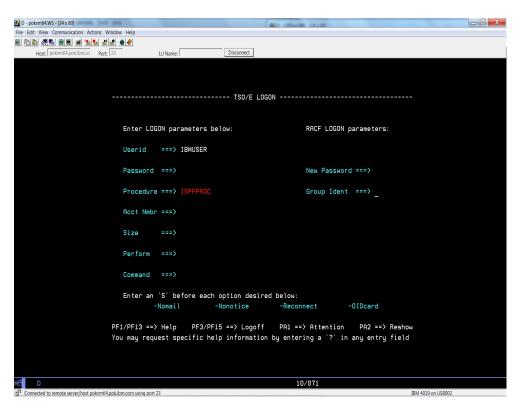
TSO/E LOGON: What Are My Options?



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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



In The Beginning...

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

>>_	LOGONuser_identity	>
	_/password _/new_password_	
>.	_ACCT(account)_ _PROC(procedure_name)_ _SIZE(integer)_	>
>.	_NOTICES MAIL MAIL _NONOTICES_ NOMAIL_ PERFORM(value)_ RECONNECT _NORECONNECT_	_>
>.	SECLABEL(security label) GROUP(name) OIDCARD	><

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



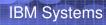
Exits - Possible Uses

- 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



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





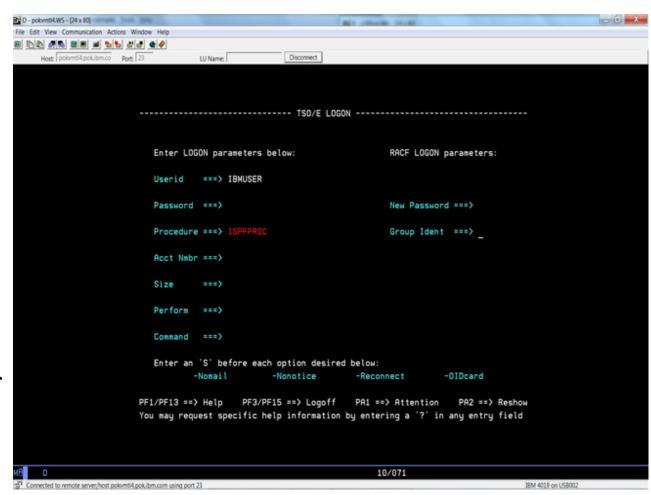
Fullscreen vs. Line Mode

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



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)

UADS User

```
account
ACCOUNT
list (IBMUSER)
 IBMUSER USER ATTRIBUTES: OPER ACCT JCL NOMOUNT RECOVER
     INSTALLATION ATTRIBUTES, IN HEX: 0000
     MAXSIZE: NOLIM
     USER PROFILE TABLE:
     003800000000000000000000020000001 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
```



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



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

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.

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

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)

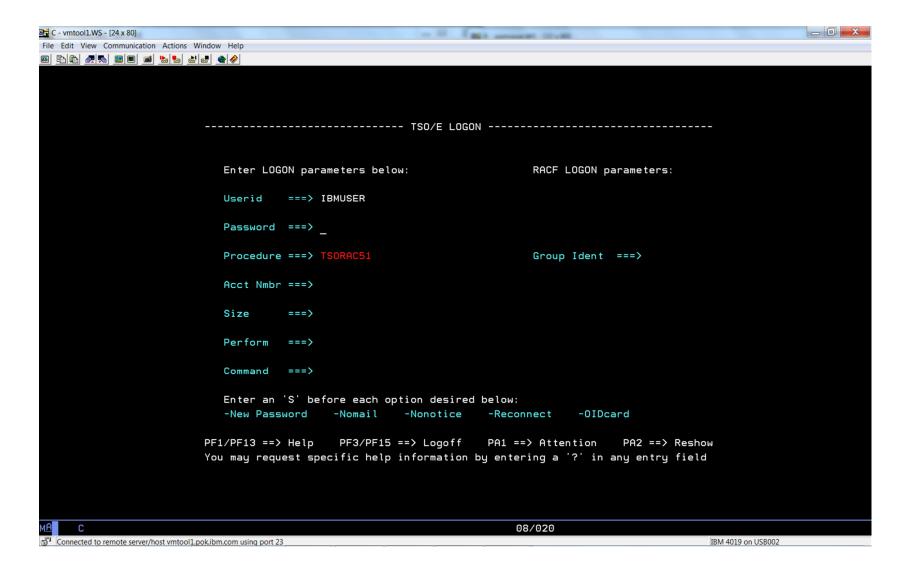
PASSWORDPREPROMPT(ON | OFF)

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







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

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



Password Preprompting

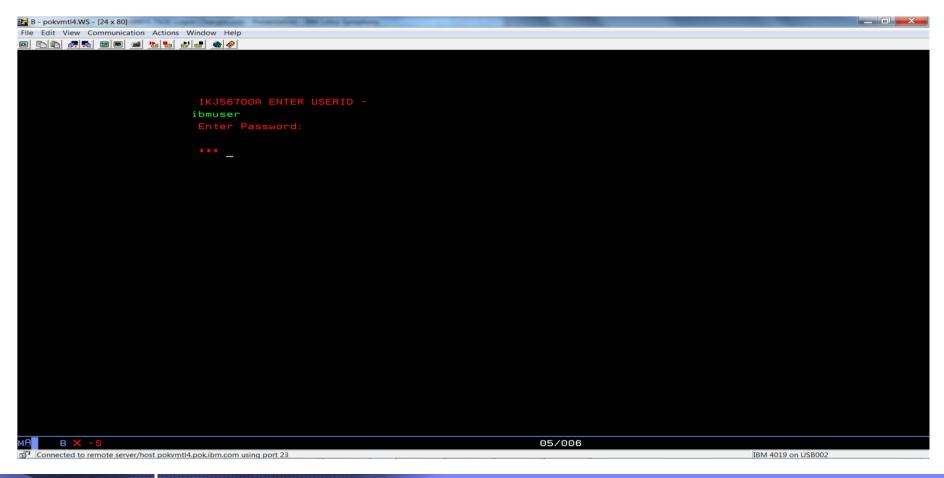
- Enabled via LOGON Statement in IKJTSOxx
 - LOGON PASSWORDPREPROMPT(ON | OFF)
- Enforces that userid and password entered prior to displaying panel
- Applies to password phrases also
- Will not provide evidence of an existing user if authentication fails
- Ensures that previous logon information is 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





Password Preprompting

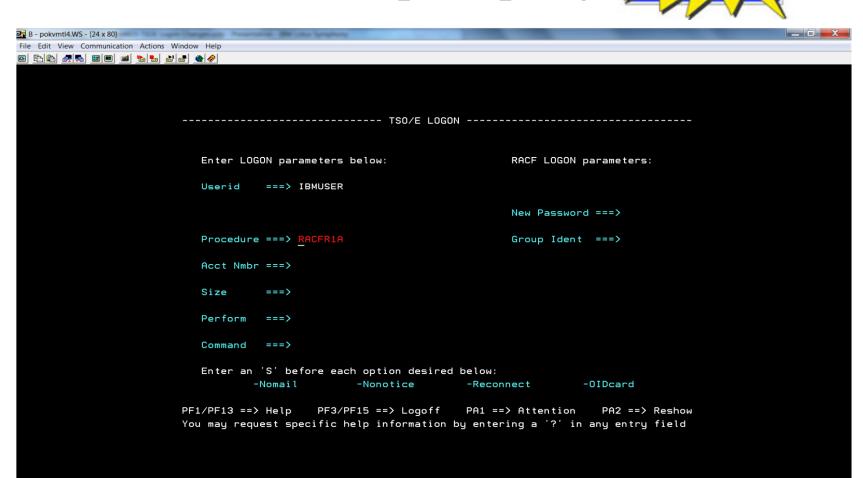




Connected to remote server/host pokvmtl4.pok.ibm.com using port 23



Password Preprompting



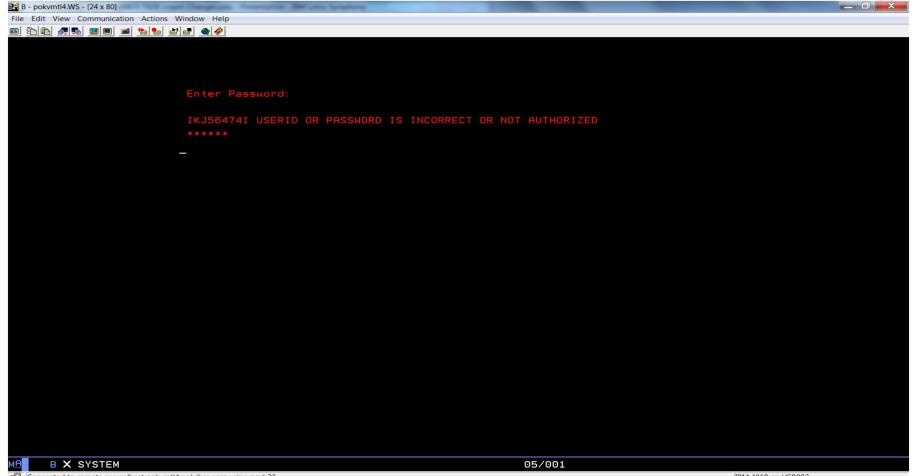
IBM 4019 on USB002

10/020



Password Preprompting





Connected to remote server/host pokymtl4.pok.ibm.com using port 23

IBM 4019 on USB002

Where Have We Been?

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- VERIFYAPPL
- LOGONHERE
- Password Preprompting

References:

TSO/E Command Reference

TSO/E Customization

TSO/E System Programming Command Reference