#SHAREorg

SHARE

Session 14867
Creating, Renewing, and Testing x.509 Digital Certificates with RACF

Intro to Hands-on "Create Certificate" Lab (Part 1)

Gwendolyn J. Dente (gdente@us.ibm.com)
IBM Advanced Technical Sales Support

Linda Harrison (lharriso@us.ibm.com)
IBM Advanced Technical Sales Support

Tuesday, March 11, 2014: 11:00 AM-12:00 PM
Session Number 14867
Platinum Ballroom Salon 7 (Anaheim Marriott Hotel)

Part 1: Create Certificates

In this 1st Document:
- **Read Descriptions of 2 required Scenarios (pp. 3-7).**
- **Find your team's IPv4 interfaces and addresses (pp. 11-22).**

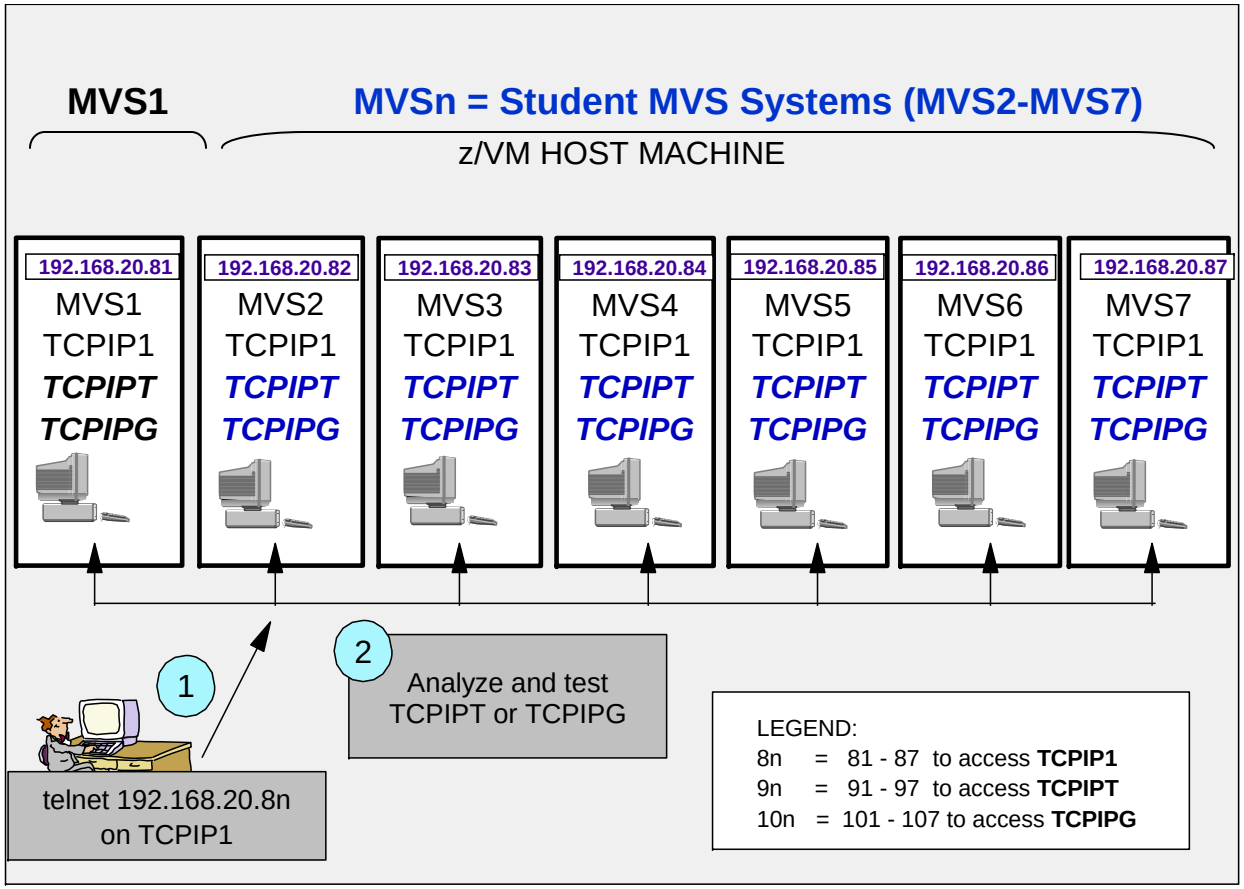
In the 2nd Lab Handout:
- **Lab starts on page 9.**

SHARE in Anaheim

Abstract

- Many security mandates require that certain types of data, including passwords, be kept confidential.
- In this lab attendees will generate with RACF x.509 digital certificates and test them for an AT-TLS implementation of FTP that has already been configured for them.
- **LAB DIFFICULTY:** INTERMEDIATE
- **PREREQUISITES:**
  - MVS ISPF experience
  - Understanding of x.509 certificate processing during SSL/TLS/AT-TLS connections. That is:
    - Difference between Certificate Authority Certificate and Personal Server or Client Certificates
    - Server Authentication with SSL/TLS/AT-TLS
- **NOTE:**
  - This Certificate Generation lab accommodates up to 12 teams simultaneously. (Teams = 1 to 2 people)
    - 6 teams work on TCPIPT stacks with the FTPTX server;
    - another 6 teams work on TCPIPG stacks with the FTPGX server.

Student MVS*n* Tests with MVS1; 2 Student TCP/IP Stacks (TCPIPT,TCPIPG)



LEGEND:

"n" represents MVS suffix (1-7)

Example: MVS*n* = MVS1-7

Example: 8*n* = 81-87

NOTE:

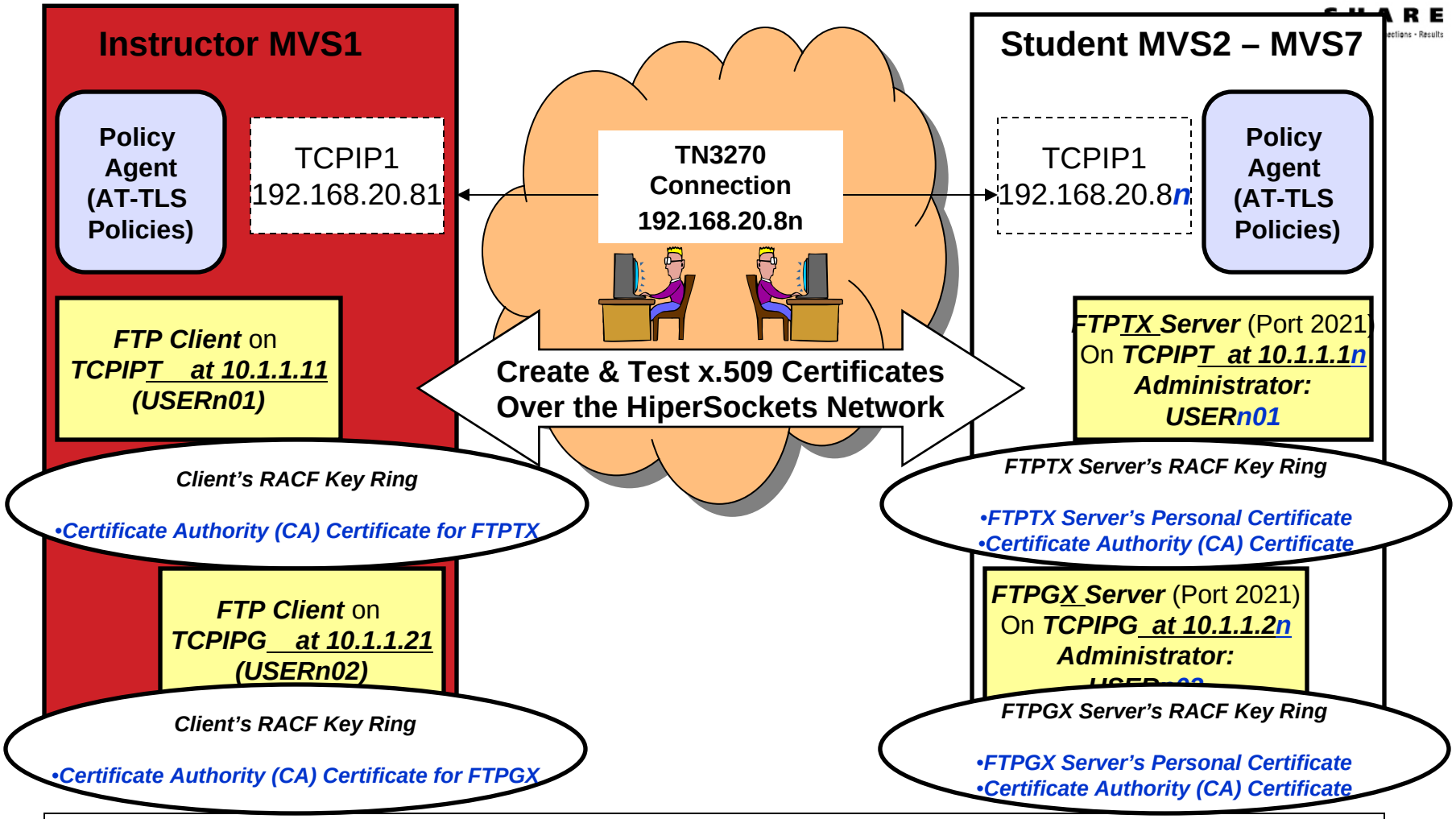
This Certificate Generation lab accommodates up to 6 teams of 1-3 members simultaneously.

USERn01 works on the TCPIPT Stack and the FTPTX server on PORT 2021 (User101 – User701)

USERn02 works on the TCPIPG Stack and the FTPGX server on PORT 2021 (User102 – User702)

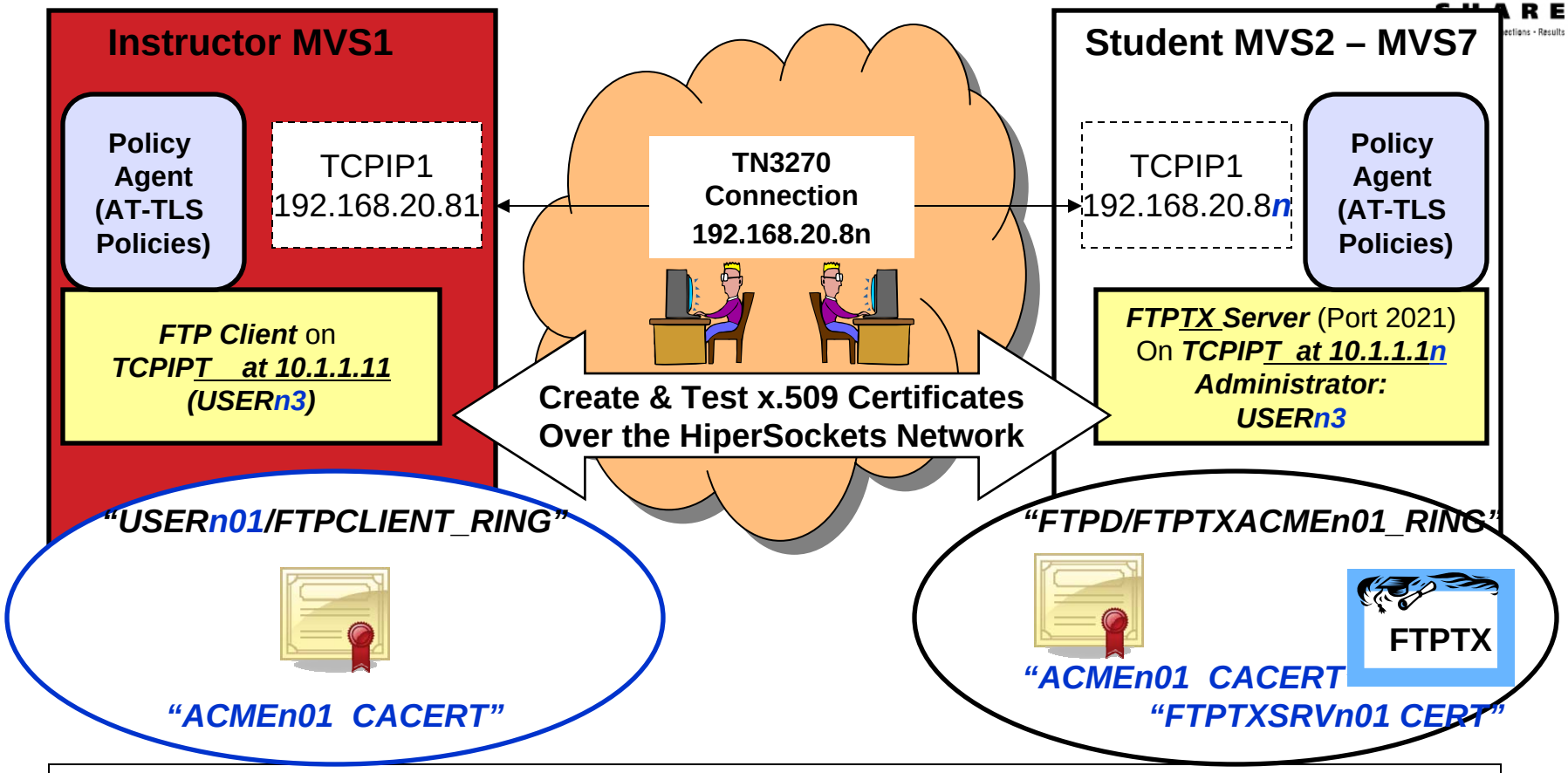
1. Telnet into Maintenance Stack (TCPIP1) at the MVSn Guest Machine.
   A. Initialize and Test your TCPIPT or TCPIPG stack with the instructor profile.
   B. Edit TCP/IP configurations for Test Stack (TCPIPT or TCPIPG) with ISPF editor under TSO
2. Initialize and Test your TCPIPT or TCPIPG with your new profile.
3. You will test your connections against the Instructor MVS: MVS1.

Scenarios: Testing FTP Secured with AT-TLS between MVS1 & Student MVS*n*



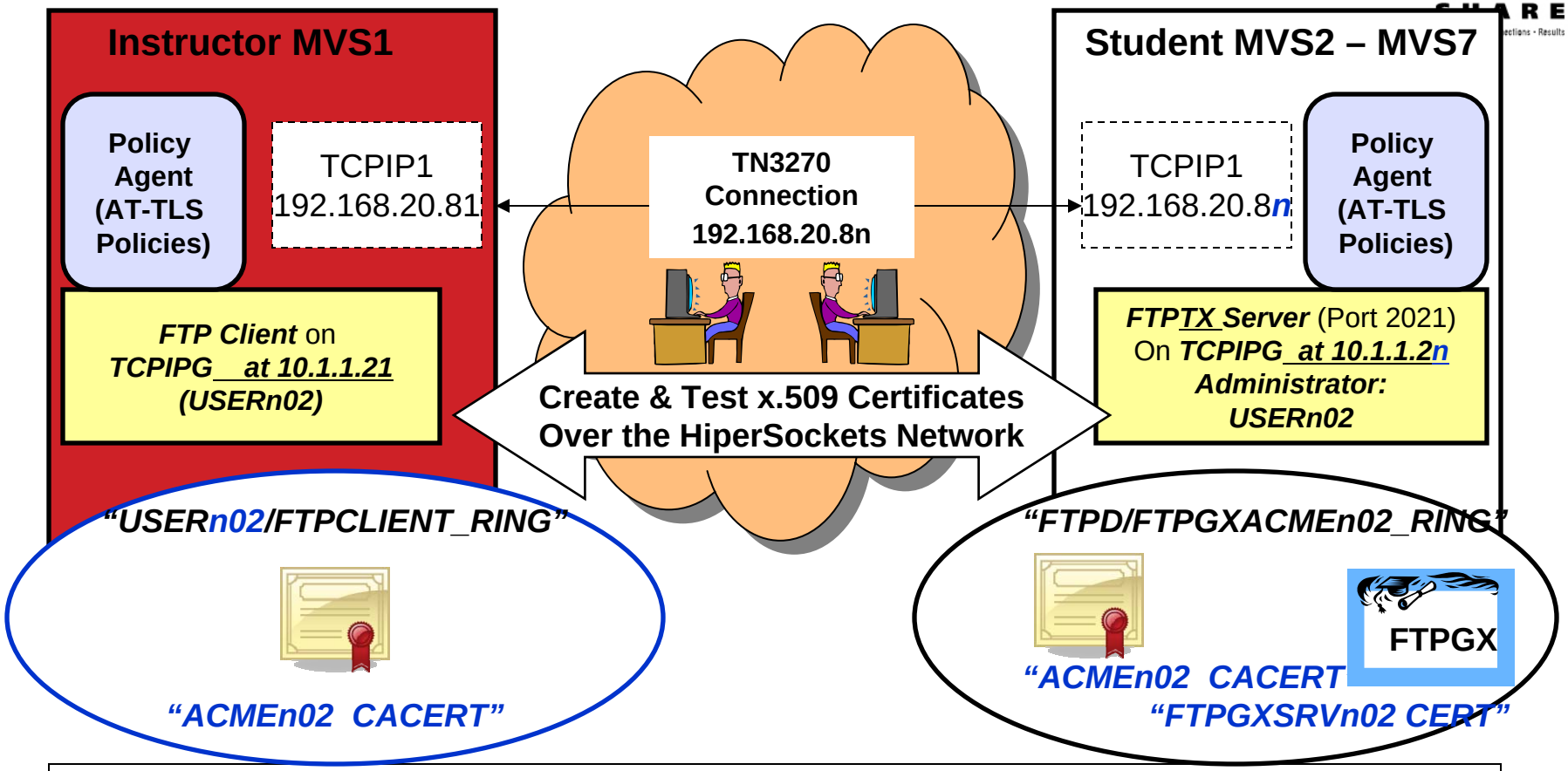
1. **A different MVS*n* Image (MVS*2* through MVS*7*) is assigned to each Student Team (USER*n0x*).**
   - ***("n" = MVS Suffix)***
2. **Each Student Team creates the x.509 certificates and Key Rings to secure the userids, passwords, and traffic between an FTP client at MVS1 and the FTP Server ("FTPTX" or "FTPGX") on the team's assigned MVS*n*.**

Key Rings and Certificates for Testing: FTPTX at TCPIPT on Student MVS*n*



1. **The Certificate Authority Certificate for each Team's MVS*n* image is named** *"ACMEn01 CACERT."*
2. **Each FTPTX Personal Certificate at each Team's MVS*n* image is named** *"FTPTXSRVn01 CERT."*
   - **The OMVS Segment of "TCPIP" is assigned to the FTPX started task. Therefore, "TCPIP" must be defined as the owner of the FTPTX Server Certificate.**
3. **The FTP Server Key Ring is named** *"FTPD/FTPTACMEn01_RING."* **It contains the FTPX Server's Personal Certificate and the MVS*n*'s CA Certificate which has signed the Server's Certificate.**
4. **The FTP Client Key Ring is named** *"USERn01/FTPCLIENT_RING."* **It contains the CA Certificate that has signed the FTPTX Server Certificate.**

Key Rings and Certificates for Testing: FTPGX at TCPIPG on Student MVS*n*



1. **The Certificate Authority Certificate for each Team's MVS*n* image is named** *"ACMEn02 CACERT."*
2. **Each FTPGX Personal Certificate at each Team's MVS*n* image is named** *"FTPGXSRVn02 CERT."*
   - **The OMVS Segment of "TCPIP" is assigned to the FTPX started task. Therefore, "TCPIP" must be defined as the owner of the FTPTX Server Certificate.**
3. **The FTP Server Key Ring is named** *"FTPD/FTPGACMEn02_RING."* **It contains the FTPGX Server's Personal Certificate and the MVS*n*'s CA Certificate which has signed the Server's Certificate.**
4. **The FTP Client Key Ring is named** *"USERn02/FTPCLIENT_RING."* **It contains the CA Certificate that has signed the FTPGX Server Certificate.**

Assignment of Student IDs to TCPIPT and TCPIPG in MVS*n*

TEAMn01 / USERn01

TCPIP*T* Stack

Primary Userid	Telnet into:
MVS1: USER101	192.168.20.81
MVS2: USER201	192.168.20.82
MVS3: USER301	192.168.20.83
MVS4: USER401	192.168.20.84
MVS5: USER501	192.168.20.85
MVS6: USER601	192.168.20.86
MVS7: USER701	192.168.20.87

TEAMn02 / USERn02

TCPIP*G* Stack

Primary Userid	Telnet into:
MVS1: USER102	192.168.20.81
MVS2: USER202	192.168.20.82
MVS3: USER302	192.168.20.83
MVS4: USER402	192.168.20.84
MVS5: USER502	192.168.20.85
MVS6: USER602	192.168.20.86
MVS7: USER702	192.168.20.87

- ***"n"*** **= Suffix of MVS Image**
- **Password: gbguser**
- **z/OS hlq: USER.CS.xxx**
- **UNIX Subdirectory: /u/user*n0x*** **(*"n0x"* is suffix of userid)**

APPENDIX A:
Addresses for MVS1 – MVS7 in TCPIPT and TCPIPG

MVS1 Addresses and (Sub)Networks - Instructor MVS - *TCPIPT*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.81

- **At Customizable TCPIPT:**

  - ***Static VIPAs:***
    - ***VLINK2*** — ***172.16.20.111 / 24***
    - ***VLINK1*** — ***192.168.20.111 / 24***
  - ***1000Base-T OSA Interface:***
    - ***GIG1F/LGIG1F (aka OSDGIG1F)*** — ***192.168.20.91 / 24***
  - ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
    - ***EZASAMEMVS*** — ***10.1.1.11 / 24***
    - ***IQDIOLNK0101010n*** — ***10.1.1.11 / 24***
  - ***Predefined HiperSocket:***
    - ***HSDELNK*** — ***172.16.20.11 / 24***
  - ***Loopback:***
    - ***LOOPBACK*** — ***127.0.0.1 / 24***
  - ***Default Gateway:*** — ***192.168.20.1 / 24***

MVS1 Addresses and (Sub)Networks - Instructor MVS - *TCPIPG*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.82

- **At Customizable TCPIPG:**

  - ***Static VIPAs:***
    - ***VLINK2*** — ***172.16.20.121 / 24***
    - ***VLINK1*** — ***192.168.20.121 / 24***
  - ***1000Base-T OSA Interface:***
    - ***GIG1F/LGIG1F (aka OSDGIG1F)*** — ***192.168.20.101 / 24***
  - ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
    - ***EZASAMEMVS*** — ***10.1.1.21 / 24***
    - ***IQDIOLNK0101010n*** — ***10.1.1.21 / 24***
  - ***Predefined HiperSocket:***
    - ***HSDELNK*** — ***172.16.20.21 / 24***
  - ***Loopback:***
    - ***LOOPBACK*** — ***127.0.0.1 / 24***
  - ***Default Gateway:*** — ***192.168.20.1 / 24***

Student MVS2 Addresses and (Sub)Networks - *TCPIPT*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.82

•Student USERID = USER201
•TSO Password = gbguser
•UNIX Subdirectory = /u/user201
•Telnet to 192.168.20.82

- **At Customizable TCPIPT:**

  - ***Static VIPAs:***
    - ***VLINK2*** ***172.16.20.112 / 24***
    - ***VLINK1*** ***192.168.20.112 / 24***
  - ***1000Base-T OSA Interface:***
    - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.92 / 24***
  - ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
    - ***EZASAMEMVS*** ***10.1.1.12 / 24***
    - ***IQDIOLNK0101010n*** ***10.1.1.12 / 24***
  - ***Predefined HiperSocket:***
    - ***HSDELNK*** ***172.16.20.12 / 24***
  - ***Loopback:***
    - ***LOOPBACK*** ***127.0.0.1 / 24***
  - ***Default Gateway:*** ***192.168.20.1 / 24***

Student MVS2 Addresses and (Sub)Networks – *TCPIPG*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.82

- Student USERID = USER202
- TSO Password = gbguser
- UNIX Subdirectory = /u/user202
- Telnet to 192.168.20.82

- **At Customizable TCPIPG:**

- ***Static VIPAs:***
  - ***VLINK2*** — ***172.16.20.122 / 24***
  - ***VLINK1*** — ***192.168.20.122 / 24***
- ***1000Base-T OSA Interface:***
  - ***GIG1F/LGIG1F (aka OSDGIG1F)*** — ***192.168.20.102 / 24***
- ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
  - ***EZASAMEMVS*** — ***10.1.1.22 / 24***
  - ***IQDIOLNK0101010n*** — ***10.1.1.22 / 24***
- ***Predefined HiperSocket:***
  - ***HSDELNK*** — ***172.16.20.22 / 24***
- ***Loopback:***
  - ***LOOPBACK*** — ***127.0.0.1 / 24***
- ***Default Gateway:*** — ***192.168.20.1 / 24***

Student MVS3 Addresses and (Sub)Networks – *TCPIPT*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.83

•Student USERID = USER301
•TSO Password = gbguser
•UNIX Subdirectory = /u/user301
•Telnet to 192.168.20.83

- **At Customizable TCPIPT:**

  - ***Static VIPAs:***
    - ***VLINK2*** ***172.16.20.113 / 24***
    - ***VLINK1*** ***192.168.20.113 / 24***
  - ***1000Base-T OSA Interface:***
    - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.93 / 24***
  - ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
    - ***EZASAMEMVS*** ***10.1.1.13 / 24***
    - ***IQDIOLNK0101010n*** ***10.1.1.13 / 24***
  - ***Predefined HiperSocket:***
    - ***HSDELNK*** ***172.16.20.13 / 24***
  - ***Loopback:***
    - ***LOOPBACK*** ***127.0.0.1 / 24***
  - ***Default Gateway:*** ***192.168.20.1 / 24***

Student MVS3 Addresses and (Sub)Networks – *TCPIPG*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.83

•Student USERID = USER302
•TSO Password = gbguser
•UNIX Subdirectory = /u/user302
•Telnet to 192.168.20.83

- **At Customizable TCPIPG:**

- ***Static VIPAs:***
  - ***VLINK2*** ***172.16.20.123 / 24***
  - ***VLINK1*** ***192.168.20.123 / 24***
- ***1000Base-T OSA Interface:***
  - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.103 / 24***
- ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
  - ***EZASAMEMVS*** ***10.1.1.23 / 24***
  - ***IQDIOLNK0101010n*** ***10.1.1.23 / 24***
- ***Predefined HiperSocket:***
  - ***HSDELNK*** ***172.16.20.23 / 24***
- ***Loopback:***
  - ***LOOPBACK*** ***127.0.0.1 / 24***
- ***Default Gateway:*** ***192.168.20.1 / 24***

Student MVS4 Addresses and (Sub)Networks – *TCPIPT*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.84

•Student USERID = USER401
•TSO Password = gbguser
•UNIX Subdirectory = /u/user401
•Telnet to 192.168.20.84

- **At Customizable TCPIPT:**

  - ***Static VIPAs:***
    - ***VLINK2*** ***172.16.20.114 / 24***
    - ***VLINK1*** ***192.168.20.114 / 24***
  - ***1000Base-T OSA Interface:***
    - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.94 / 24***
  - ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
    - ***EZASAMEMVS*** ***10.1.1.14 / 24***
    - ***IQDIOLNK0101010n*** ***10.1.1.14 / 24***
  - ***Predefined HiperSocket:***
    - ***HSDELNK*** ***172.16.20.14 / 24***
  - ***Loopback:***
    - ***LOOPBACK*** ***127.0.0.1 / 24***
  - ***Default Gateway:*** ***192.168.20.1 / 24***

Student MVS4 Addresses and (Sub)Networks – *TCPIPG*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.84

•Student USERID = USER402
•TSO Password = gbguser
•UNIX Subdirectory = /u/user402
•Telnet to 192.168.20.84

- **At Customizable TCPIPG:**

- ***Static VIPAs:***
  - ***VLINK2*** ***172.16.20.124 / 24***
  - ***VLINK1*** ***192.168.20.124 / 24***
- ***1000Base-T OSA Interface:***
  - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.104 / 24***
- ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
  - ***EZASAMEMVS*** ***10.1.1.24 / 24***
  - ***IQDIOLNK0101010n*** ***10.1.1.24 / 24***
- ***Predefined HiperSocket:***
  - ***HSDELNK*** ***172.16.20.24 / 24***
- ***Loopback:***
  - ***LOOPBACK*** ***127.0.0.1 / 24***
- ***Default Gateway:*** ***192.168.20.1 / 24***

Student MVS5 Addresses and (Sub)Networks – *TCPIPT*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.85

•Student USERID = USER501
•TSO Password = gbguser
•UNIX Subdirectory = /u/user501
•Telnet to 192.168.20.85

- **At Customizable TCPIPT:**

  - ***Static VIPAs:***
    - ***VLINK2*** ***172.16.20.115 / 24***
    - ***VLINK1*** ***192.168.20.115 / 24***
  - ***1000Base-T OSA Interface:***
    - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.95 / 24***
  - ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
    - ***EZASAMEMVS*** ***10.1.1.15 / 24***
    - ***IQDIOLNK0101010n*** ***10.1.1.15 / 24***
  - ***Predefined HiperSocket:***
    - ***HSDELNK*** ***172.16.20.15 / 24***
  - ***Loopback:***
    - ***LOOPBACK*** ***127.0.0.1 / 24***
  - ***Default Gateway:*** ***192.168.20.1 / 24***

Student MVS5 Addresses and (Sub)Networks – *TCPIPG*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.85

•Student USERID = USER502
•TSO Password = gbguser
•UNIX Subdirectory = /u/user502
•Telnet to 192.168.20.85

- **At Customizable TCPIPG:**

- ***Static VIPAs:***
  - ***VLINK2*** ***172.16.20.125 / 24***
  - ***VLINK1*** ***192.168.20.125 / 24***
- ***1000Base-T OSA Interface:***
  - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.105 / 24***
- ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
  - ***EZASAMEMVS*** ***10.1.1.25 / 24***
  - ***IQDIOLNK0101010n*** ***10.1.1.25 / 24***
- ***Predefined HiperSocket:***
  - ***HSDELNK*** ***172.16.20.25 / 24***
- ***Loopback:***
  - ***LOOPBACK*** ***127.0.0.1 / 24***
- ***Default Gateway:*** ***192.168.20.1 / 24***

Student MVS6 Addresses and (Sub)Networks – *TCPIPT*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.86

•Student USERID = USER601
•TSO Password = gbguser
•UNIX Subdirectory = /u/user601
•Telnet to 192.168.20.86

- **At Customizable TCPIPT:**

  - ***Static VIPAs:***
    - ***VLINK2*** ***172.16.20.116 / 24***
    - ***VLINK1*** ***192.168.20.116 / 24***
  - ***1000Base-T OSA Interface:***
    - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.96 / 24***
  - ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
    - ***EZASAMEMVS*** ***10.1.1.16 / 24***
    - ***IQDIOLNK0101010n*** ***10.1.1.16 / 24***
  - ***Predefined HiperSocket:***
    - ***HSDELNK*** ***172.16.20.16 / 24***
  - ***Loopback:***
    - ***LOOPBACK*** ***127.0.0.1 / 24***
  - ***Default Gateway:*** ***192.168.20.1 / 24***

Student MVS6 Addresses and (Sub)Networks – *TCPIPG*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.86

•Student USERID = USER602
•TSO Password = gbguser
•UNIX Subdirectory = /u/user602
•Telnet to 192.168.20.86

- **At Customizable TCPIPG:**
  - ***Static VIPAs:***
    - ***VLINK2*** ***172.16.20.126 / 24***
    - ***VLINK1*** ***192.168.20.126 / 24***
  - ***1000Base-T OSA Interface:***
    - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.106 / 24***
  - ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
    - ***EZASAMEMVS*** ***10.1.1.26 / 24***
    - ***IQDIOLNK0101010n*** ***10.1.1.26 / 24***
  - ***Predefined HiperSocket:***
    - ***HSDELNK*** ***172.16.20.26 / 24***
  - ***Loopback:***
    - ***LOOPBACK*** ***127.0.0.1 / 24***
  - ***Default Gateway:*** ***192.168.20.1 / 24***

Student MVS7 Addresses and (Sub)Networks – *TCPIPT*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.87

•Student USERID = USER701
•TSO Password = gbguser
•UNIX Subdirectory = /u/user701
•Telnet to 192.168.20.8

- **At Customizable TCPIPT:**

- ***Static VIPAs:***
  - ***VLINK2*** ***172.16.20.117 / 24***
  - ***VLINK1*** ***192.168.20.117 / 24***
- ***1000Base-T OSA Interface:***
  - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.97 / 24***
- ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
  - ***EZASAMEMVS*** ***10.1.1.17 / 24***
  - ***IQDIOLNK0101010n*** ***10.1.1.17 / 24***
- ***Predefined HiperSocket:***
  - ***HSDELNK*** ***172.16.20.17 / 24***
- ***Loopback:***
  - ***LOOPBACK*** ***127.0.0.1 / 24***
- ***Default Gateway:*** ***192.168.20.1 / 24***

Student MVS7 Addresses and (Sub)Networks – *TCPIPG*

- **At Control or Maintenance TCPIP1:**
  - Telnet Address is 192.168.20.87

•Student USERID = USER702
•TSO Password = gbguser
•UNIX Subdirectory = /u/user702
•Telnet to 192.168.20.87

- **At Customizable TCPIPG:**

- ***Static VIPAs:***
  - ***VLINK2*** ***172.16.20.127 / 24***
  - ***VLINK1*** ***192.168.20.127 / 24***
- ***1000Base-T OSA Interface:***
  - ***GIG1F/LGIG1F (aka OSDGIG1F)*** ***192.168.20.107 / 24***
- ***Dynamic XCF Interfaces (incl. Dynamic HiperSocket):***
  - ***EZASAMEMVS*** ***10.1.1.27 / 24***
  - ***IQDIOLNK0101010n*** ***10.1.1.27 / 24***
- ***Predefined HiperSocket:***
  - ***HSDELNK*** ***172.16.20.27 / 24***
- ***Loopback:***
  - ***LOOPBACK*** ***127.0.0.1 / 24***
- ***Default Gateway:*** ***192.168.20.1 / 24***

APPENDIX B: References

References

- **RACF References:**
  - **z/OS Security Server RACF Security Administrator's Guide (SA22-7683)**
  - **z/OS Security Server RACF Command Language Reference (SA22-7687)**
- **z/OS Communications Server References:**
  - **z/OS Communications Server IP Configuration Guide (SC31-8775)**
  - **z/OS Communications Server IP Configuration Reference (SC31-8776)**

APPENDIX C: Instructor Setup Jobs & References

Configuration Assistant BINARY file with AT-TLS Policies is:

Tch2013_CreateandREFRESHLabs-01

CLEANUP AFTER CLASS:

RUN ONLY ACMED100.

Clears out Certs and Keyrings.

Next class will delete USER.CS.SOURCE and /u/usernn directory contents

Instructor-run Jobs Prior to Lab

At one MVS: EMPTYSRC Delete of contents of USER.CS.SOURCE and of CERT REQUEST FILES from CERTRefresh Lab (Both Labs)
At one MVS: UNIX Copy Jobs for Policy Agent Setup and Policies at all systems

- /BACKUP/CSPOLICY/CERTREFRESH/ussCERTCreateRefresh.sh (is for both the CREATE and REFRESH lab)

At one MVS: Copy of jobs into user.cs.source from SYS1.CS.CNTL(EMPTYCRE)
At MVS1:

- ***SYS1.CS.CNTL(ACMED100)*** – to delete the certificates and keyrings from previous class (MVS
- SYS1.CS.CNTL(RACFPSEC) -- against shared RACF Database from one system
- SYS1.CS.CNTL(RACFP100) -- against shared RACF Database from one system
- SYS1.CS.CNTL(RACFSIZE) -- against shared RACF Database """""""""""""
- NOTE: Your instructor will already have initialized the following procedures at MVS1 – the system from which you will be testing:
  - /s TCPIP1 and /s TN3270 and /s FTPCCL
  - /s PAGENTT

FTP.DATA of FTPSAUTH specifies

Server Authentication Only

WARNING: If you are running both the create lab and the renew certificate lab, run the jobs EMPTYCRE and EMPTYSRC only once – it will copy what is needed for both labs

  - /S TCPIPT,PROF=TCPSn1,CS=SYS1
    - /V TCPIP,TCPIPT,O,SYS1.CS.TCPPARMS(TLSON)
    - /s FTPTX,cs=sys1,data=dat1a
  - /S TCPIPG,PROF=TCPSn2,CS=SYS1
    - /V TCPIP,TCPIPT,O,SYS1.CS.TCPPARMS(TLSON)
    - /s FTPGX,cs=sys1,data=datag

  /S tn3270t
    - TN3270T PROC PARMS='CTRACE(CTIEZBTN)',PROF=TN&CL1.A,CS=SYS1, DATA=DAT&CL1.A

On Your MVS:

1) Your Instructor will have run these
2) /s TCPIP1 and /s TN3270 and /s FTPCCL
3) /s PAGENTT

- /S TCPIPT, CS=SYS1,PROF=TCPSn1
  - /V TCPIP,TCPIPT,O,SYS1.CS.TCPPARMS(TLSON)
  - /s FTPTX,cs=sys1,data=datNa
- /S TCPIPG, CS=SYS1,PROF=TCPSn2
  - /V TCPIP,TCPIPT,O,SYS1.CS.TCPPARMS(TLSON)
  - /s FTPGX,cs=sys1,data=datag

OTHER INFORMATION:

- SCENARIO 1 Command for TEST: ===> ftp -r TLS -f "//'sys1.cs.tcpparms(ftpclsec)'" -p TCPIPT -s 10.1.1.11 10.1.1.1*n*
- /s SPECUSER = procedure to execute SETROPTS with Special User Authority

#SHAREorg

SHARE

Creating, Renewing, and Testing x.509 Digital Certificates with RACF

Intro to Hands-on "Create Certificate" Lab (Part 1)

Gwendolyn J. Dente (gdente@us.ibm.com)
IBM Advanced Technical Sales Support

Linda Harrison (lharriso@us.ibm.com)
IBM Advanced Technical Sales Support

Tuesday, August 13, 2013 (11AM-12Noon)
Session Number 13541
Hines Room 202

Part 1: Create Certificates

SHARE in Anaheim

#SHAREorg

SHARE

Creating, Renewing, and Testing x.509 Digital Certificates with RACF

Intro to Hands-on "Create Certificate" Lab (Part 1)

Gwendolyn J. Dente (gdente@us.ibm.com)
IBM Advanced Technical Sales Support

Linda Harrison (lharriso@us.ibm.com)
IBM Advanced Technical Sales Support

Tuesday, August 13, 2013 (11AM-12Noon)
Session Number 13541

Part 1: Create Certificates

In this 1st Document:
- **Read Descriptions of 2 required Scenarios (pp. 3-7).**
- **Find your team's IPv4 interfaces and addresses (pp. 11-22).**

In the 2nd Document:
- **Lab starts on page 9.**

SHARE in Anaheim