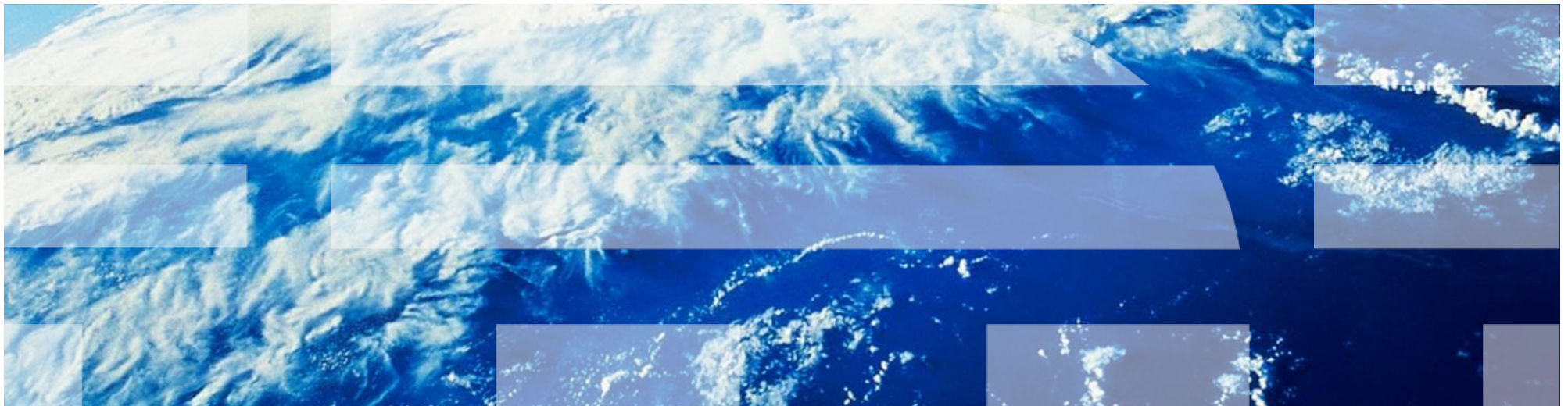

Removal of BPX.DEFAULT.USER Profile LI2914

LWard@us.ibm.com



Summary

What?

z/OS V1.13 is the last release to support FACILITY class profile
BPX.DEFAULT.USER

Why?

When BPX.DEFAULT.USER support is used, many users of
UNIX System Services can share a UID and GID

What do you need to do?

You must either:

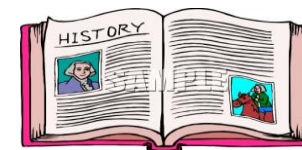
1) Assign a unique UID to each user and GID to each group

-or-

2) Use the BPX.UNIQUE.USER support to **automatically** assign a
unique UID to each USS user and a unique GID for their group



A little history...



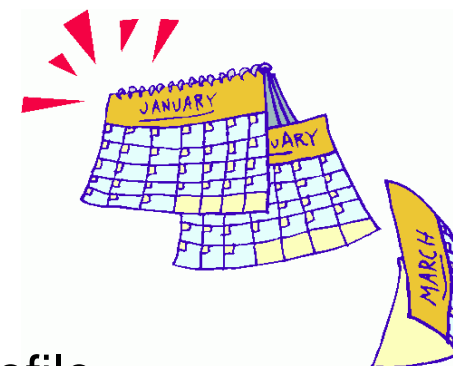
- OS/390 Release 4 (1997) introduced BPX.DEFAULT.USER profile
 - A way to allow an MVS user to use USS services **without a defined OMVS segment**.
 - Primary purpose was to enable use of UNIX sockets for every FTP user with minimal RACF administration
 - UID defined in the profile could be shared between many users

- z/OS V1R4 (2002) introduced AUTOUID keyword on ALTUSER command
 - Made it easier to generate 'next' unique UID
 - Requires Application Identity Mapping (AIM) Stage 2

- Years passed...
 - IBM encouraged use of unique UIDs assigned to each user
 - More and more Unix services were added
 - Default UIDs were still be used and misused

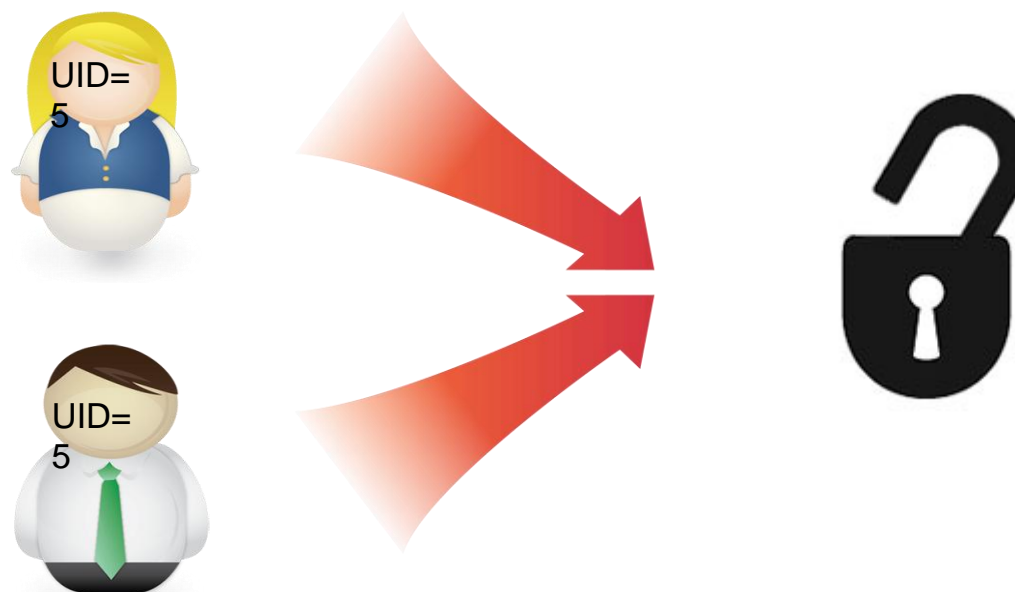
- z/OS V1R11 (2009) introduced BPX.UNIQUE.USER profile
 - Automatic “on-demand” generation of unique UIDs and GIDs
 - When a z/OS UNIX service is invoked by a user **without an OMVS segment**, a unique UID is permanently assigned
 - Requires Application Identity Mapping (AIM) Stage 3

- z/OS V1.13 (2011) is the last release to support BPX.DEFAULT.USER



What's wrong with using BPX.DEFAULT.USER?

- Shared UID produces audit non-conformances
 - No accountability for who did what, who owns what, etc.
- If a Unix service creates a resource while running with a shared UID, that resource is available to all users running with that shared UID
- Certain Unix services are not allowed when user has default UID
 - kill(), sigqueue(), pidaffinity(), ptrace



How do I know if I am using BPX.DEFAULT.USER?

- Wait for OA37164
 - RACF Health and Migration checks for z/OS V1R12 and higher
- In the meantime, here are some other checks:
 - Does the FACILITY class profile BPX.UNIQUE.USER exist?
 - Yes → then you are not using BPX.DEFAULT.USER
 - No...continue
 - Does the FACILITY class profile BPX.DEFAULT.USER exist?
 - Yes → then you are probably using it
 - Check your SMF records
 - Bit which “Indicates a default z/OS UNIX security environment is in effect” is in extended relocate section at location 317 (13D)
 - Event codes 28-58, 60-65
 - SMF unload fields xxxx_DFLT_PROCESS
 - xxxx is the prefix to the SMF unload record, such as CMOD, COWN



How can I stop using BPX.DEFAULT.USER?

- Start using FACILITY profile BPX.UNIQUE.USER instead
 - Directions are in RACF Security Administrator's Guide
 - Requirements:
 - FACILITY profile BPX.UNIQUE.USER must exist
 - RACF database must be at AIM (Application Identity Mapping) stage 3
 - Run utility IRRIRA00 to check
 - UNIXPRIV class profile SHARED.IDS must be defined
 - UNIXPRIV class must be active and RACLISTed
 - FACILITY class profile BPX.NEXT.USER must be defined and its APPLDATA field must contain valid ID values or ranges

- Or assign a UID to every user and a GID to every group
 - ALTUSER MARCY OMVS(AUTOUID))
 - ALTGROUP DEPT5 OMVS(AUTOGID))
 - Here is an easy way to assign a unique GID to all your groups
 - SEARCH CLASS(GROUP) NOLIST CLIST('ALTGROUP' 'OMVS(AUTOGID)')
 - EX EXEC.RACF.CLIST



What happens if I do nothing?

- In z/OS V1R13, nothing changes
- In next release, BPX.DEFAULT.USER profile will be ignored
 - You may get warning messages from the z/OS Health Checker
 - Users with no OMVS segment or no UID will not be able to run any Unix service



Summary

What?

z/OS V1.13 is the last release to support FACILITY class profile
BPX.DEFAULT.USER

What do you need to do?

You must either:

1) Assign a unique UID to each user and GID to each group

-or-

2) Use the BPX.UNIQUE.USER support to **automatically** assign a unique UID to each USS user and a unique GID for their group



Additional Info



Publications

- *z/OS Security Server RACF Security Administrator's Guide*
- Section "Automatically assigning unique IDs through UNIX services"

Statement of Direction

- From *Preview: z/OS Version 1 Release 13 and z/OS Management Facility Version 1 Release 13* are planned to offer new availability, batch programming, and usability functions
 - IBM United States Software Announcement 211-007
 - February 15, 2011
 - z/OS V1.13 is planned to be the last release to support BPX.DEFAULT.USER. IBM recommends that you either use the BPX.UNIQUE.USER support that was introduced in z/OS V1.11, or assign unique UIDs to users who need them and assign GIDs for their groups.