IBM Software Group

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Recent TPFAR Enhancements

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AIM Enterprise Platform Software
IBM z/Transaction Processing Facility Enterprise Edition 1.1.0

TPFAR is alive and well

And as a reminder... TPFAR is included as part of the base z/TPF product. There is no longer a seperate license fee for TPFAR.

Recent Enhancements

- PJ29465
  - Userid and Password
  - Stored Procedures
  - Improved throughput for multi-row requests
  - DB2 V7 and DB2 V8 support
- PJ30189
  - Single Source APAR for TPF 4.1/zTPF

PJ29465 - Userid and Password

- Default security mechanism for TCP/IP is userid-only
  - Violates many IT security guidelines
  - Userid is TPF complex name from Keypoint I
- TPF has no built-in userid facilities
  - Not the objective of this enhancement to change that
- Need a mechanism to define and alter a userid and password

PJ29465 - Userid and Password *(continued)*

- Default security mechanism remains the same
- ZSQLD ADD/MODIFY USERid-***userid*** PASSword-***password***
  - Password is only applicable for TCP/IP
  - Password is not displayable through ZSQLD commands
  - If a password is specified then userid/password security is used
- If a userid is specified then it is used in place of the TPF complex name.
  - Userid is unique per database definition
- If userid or password are changed then hotcons are released
  - Current connections are not added to hotcon table

PJ29465 - Stored Procedure Support

- TPF now supports SQL stored procedures
  - Does not support a multi-row result set returned to TPF
- Can be statically bound or, bound at runtime.

PJ29465 - Improved Multi-row performance

- QRYBLKSZ is now set to 28000 bytes
  - TPF has a 32K size restriction, unchanged by this support
- Previously 3800 bytes
- Allows more data to be returned to TPF by DB2 at once
- Reduces number of I/O requests to send data between systems
- No actions required by user to utilize new size.

PJ29465 - DB2 V7 and DB2 V8 Support

- Updated DB2PP to handle the new precompiler output
  - New variables created by precompiler
    - DSNTEMP, DSNNROWS
  - Size of SQLTEMP increased from 19 to 129 bytes
- Updated runtime bind processing to accomodate all releases.

PJ30189 - Single source apar for TPFAR

- Introduces datatype of sqlint32
  - 4 byte length in both TPF 4.1 and z/TPF
  - use in place of long for 4 byte data types
- A datatype of long must be used with caution
  - long datatype for applications precompiled using DB2 on Linux will give an 8 byte datatype
  - **long datatype for applications precompiled using z/OS is not currently supported by z/TPF and will yield unpredictable results**.

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