TPF Users Group Fall 2007

z/TPF Support for MySQL

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Venue: Main Tent

- What is MySQL?
- Why MySQL?
- How well does MySQL work?
- How do I get MySQL?

- What is MySQL?
  - Open Source – Relational SQL Database
  - Supports Different “Storage Engines”
    - MyISAM
      - Maps Databases to Directories
      - Maps Tables to Individual Files
      - Most flexible
    - InnoDB
      - Transactional (Commit scope)
      - Maps Tables to file space in fixed files
      - Less file system overhead
    - Memory
      - Non-persistant but least overhead
      - More restrictive
    - Federated
      - Distributed – points to a table on a remote MySQL server
      - Partioning data across a complex

- Why MySQL?
  - Stored Procedures
    - Write a function-like “query”
    - Provide consistent interface
      - Alter query without changing applications
  - Triggers
    - Update another table based on update to current table”
  - Common usage
    - –A Wealth of tools available to work with MySQL
    - –MySQL Administrator
    - –MySQL Workbench
    - –MySQL Query Browser
  - A Wealth of platforms
    - ODBC
    - JDBC
    - C/C++

- Why MySQL (cont)
  - Query cache
    - Storing end result of query in case of same question
    - Great for computationally intensive queries with few updates
      - Low update rate
      - Low “query world”
      - Configurable at query level
        - (Query can decide if it should be cached or not)
  - User Defined functions
    - Can use C/C++ to extend MySQL functionality
      - For instance, can retrieve data from native TPF sources Common usage
      - –A Wealth of tools available to work with MySQL
      - –MySQL Administrator
      - –MySQL Workbench
      - –MySQL Query Browser
  - Open Source
    - Steady development stream
    - Supported by commercial license as needed
    - Source code available for updates (write your own table)

- How well does MySQL work on TPF?

- Pool file system
  - Insert rate (starting from zero, random insert)
    - 49.7 sp, 48.3 inserts per second
  - Select rate (single indexed key based select)
    - 49.6 sp, 50.8 selects per second

- Memory file system
  - Insert rate (starting from zero, random insert)
    - 30.5 sp, 40 inserts per second
  - Select rate (single indexed key based select)
    - 29.2 sp, 40.9 selects per second

- How do I get MySQL?
  - Download from www.mysql.com
- z/TPF Support APAR (PJ31639) and prereqs
- Build files included with APAR
- Supported version 5.0.27
  - IBM Tested version
  - May support for later versions as needed
    - Customer Requested
    - Critical bug detected

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