

z/TPF V1.1

2013 TPF Users Group

WODM Education



AIM Enterprise Platform Software IBM z/Transaction Processing Facility Enterprise Edition 1.1

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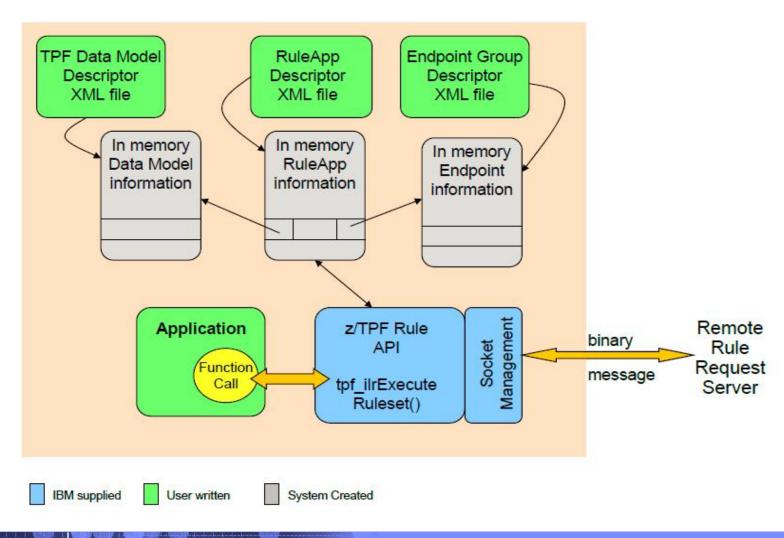


Agenda

- Brief Overview
- Endpoints
- Data Model
- RuleApps



Overview





Endpoints – design overview

Raw data transmission

- Working toward sending the data as it is stored on z/TPF, instead of transformation
- Java classes are instantiated through reflection

Connected, dedicated sockets

- z/TPF keeps a pool of "connected" sockets
- Each socket has an allocated, initialized thread ready on the remote host



Endpoints – configuration

Managing endpoint group queues

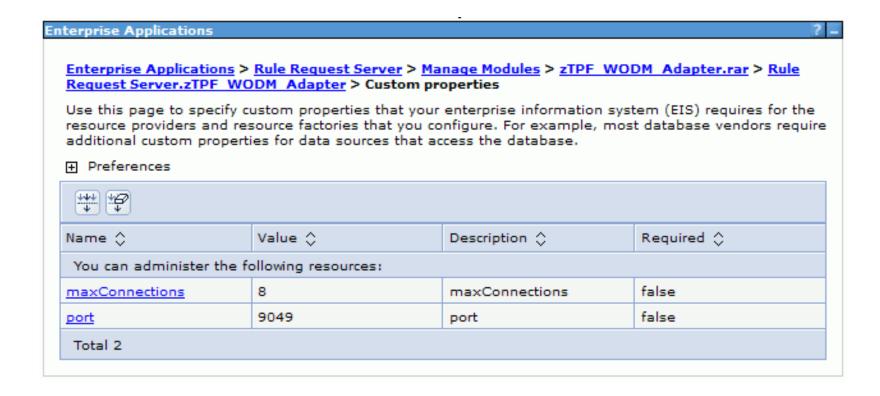
- qMaxDepth Number of ECBs waiting or timed out and not cleared
- qThreshold Warning for queue developing (need for expansion?)

Max connections (maxSocket)

- Defined on per processor basis
- Slow socket sweeper can remove inactive connections
- Cannot exceed the thread pool for the rule request server



Rule Request Server configuration





Data Model – design overview

Multi-platform definitions of data

- No pointers, flat data representation
- Allow for variable size definitions
 - Varying length strings
 - totalSize

Generation of Java code

- Rule request server contains generated code for each object definition to interface with Java environment.
- Generated Java classes needed for Rule Designer



Data Model - configuration

- Object list and Object names must be unique across all TDMs
- No unsigned types in Java
- Encoding for character type data (String type in Java)
 - char
 - charString
 - vcharString



Data Model – varying length string macros

- TPF_DM_GETCOUNT_<object>_<member>(pstruct)
 - Array size (repeat value given in TDM definition)
- TPF_DM_GETSIZE_<object>(pstruct)
 - Replacement for sizeof()
- TPF_DM_INIT_<object>(pstruct)
 - Replacement for memset(struct, 0x00, sizeof(struct))



Data Model – varying length string macros (cont'd)

- TPF_DM_GETLENGTH_<object>_<member>_I(pstr uct, index)
 - Get length of varying length string by index
- TPF_DM_GET_<object>_<member>_I(pstruct, index)
 - Get varying length string by index
- TPF_DM_SET_<object>_<member>_I(pstruct, index, value, length)
 - Set varying length string by index



RuleApps - overview

- Unit of packaging and deployment of rulesets for the Rule Execution Server
 - RuleApp project in Rule Designer
- Interface definition for z/TPF
 - Ruleapp.ilr.xml
- Part of ruleset path used for invocation
 - <RuleApp>/<RuleAppVersion>/<RuleSet>/<RuleSetVersion>



RuleApp deployment





RuleApps - Versioning

- Required in RuleApp deployment
- Required in XML interface definition
- Not required in ruleset invocation
- Possible usage:
 - Update RuleApp version on every change, but don't include RuleApp version in invocation.
 - Update Ruleset version on parameter change and include Ruleset version in invocation.



Questions?



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