IBM Software Group

Improving performance with HA Active-Active and Paging feature of WebSphere Adapter for JDBC

Vinod Valecha (vinod.valecha@in.ibm.com)
WebSphere Adapter Development & Level 3 Support
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Agenda

- Overview
- HA Active-Active
- Paging
- Demonstrations
- Questions

Overview

- WebSphere Adapter for JDBC enables to create integrated applications that can interact and exchange information with a database.
- Outbound processing - enables an application to access or modify data in a database.
- Inbound processing - enables an application to receive notification when objects in the database are changed.

HA Active-Active

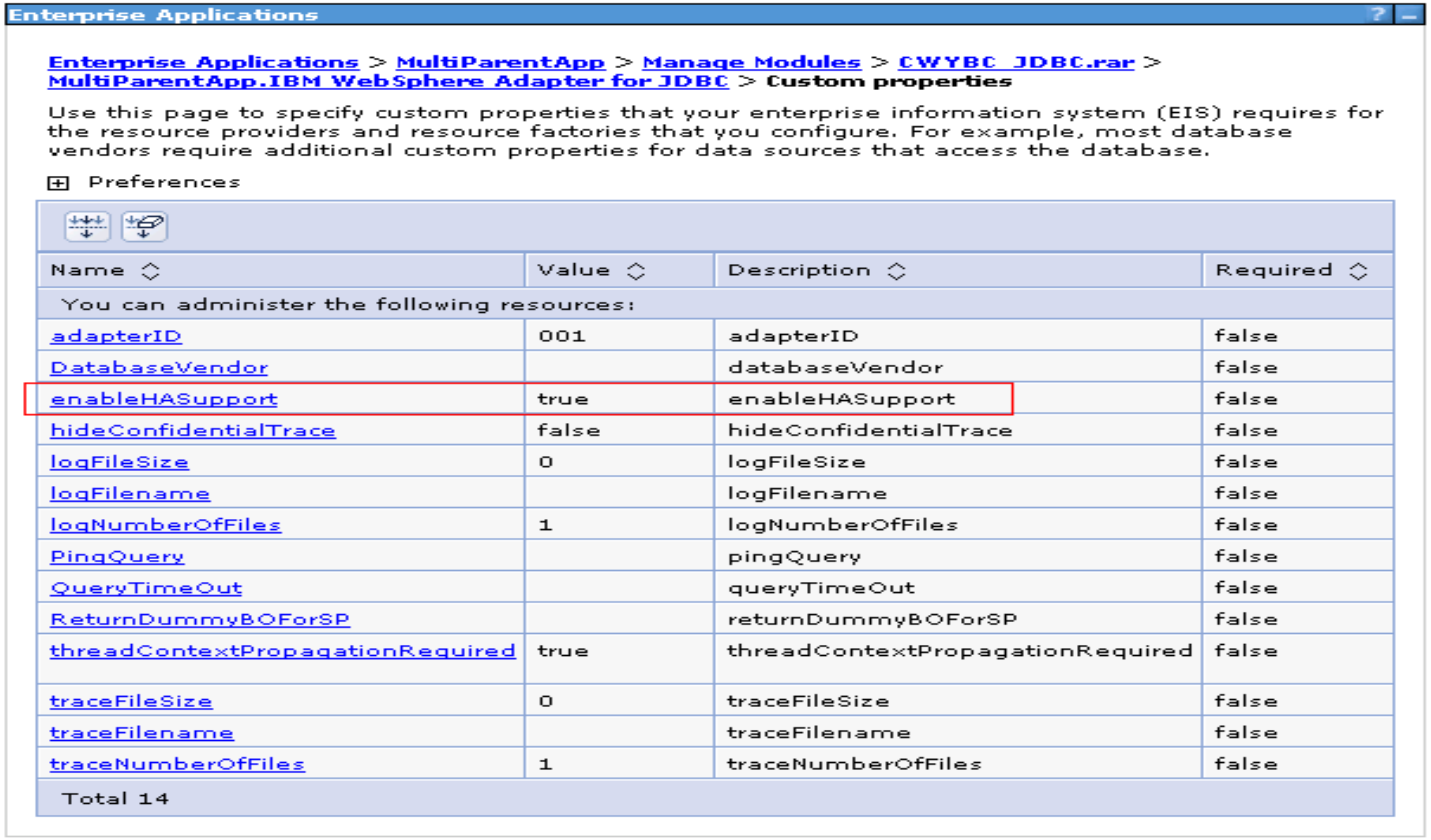
- Previous behavior - HA Active-Passive
- Multiple adapter instances can poll the events in parallel.
- In event handling phase, other applications can generate events in parallel.
- Any instance going down, the events will be handled by other instance.
- All events will be processed even if only one adapter instance is available.

HA Active-Active - Performance

- Load Balancing
- Parallel processing of events results into better through-put
- High Availability for mission critical application like Banking, etc
- Extremely useful for high load systems where rate of processing of events is critical
- Much greater potential as compared to HA active-passive scenario

HA Active-Active - EMD

- *enableHASupport* property



Enterprise Applications

Enterprise Applications > MultiParentApp > Manage Modules > CWYBC_JDBC.rar > MultiParentApp.IBM WebSphere Adapter for JDBC > **Custom properties**

Use this page to specify custom properties that your enterprise information system (EIS) requires for the resource providers and resource factories that you configure. For example, most database vendors require additional custom properties for data sources that access the database.

Preferences

Name	Value	Description	Required
You can administer the following resources:			
adapterID	001	adapterID	false
DatabaseVendor		databaseVendor	false
enableHASupport	true	enableHASupport	false
hideConfidentialTrace	false	hideConfidentialTrace	false
logFileSize	0	logFileSize	false
logFilename		logFilename	false
logNumberOfFiles	1	logNumberOfFiles	false
PingQuery		pingQuery	false
QueryTimeOut		queryTimeOut	false
ReturnDummyBOForSP		returnDummyBOForSP	false
threadContextPropagationRequired	true	threadContextPropagationRequired	false
traceFileSize	0	traceFileSize	false
traceFilename		traceFilename	false
traceNumberOfFiles	1	traceNumberOfFiles	false
Total 14			

Paging

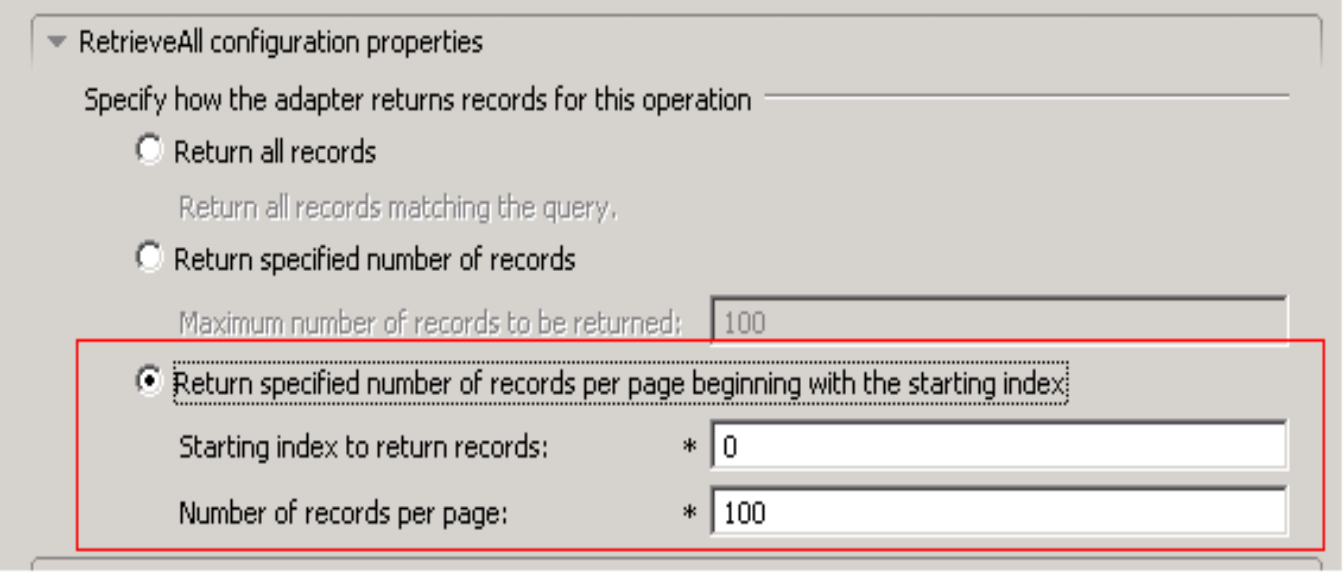
- Paging scenario – Retrieve_All operation
- Returns only the specified number of records per page
- enablePaging, indicate if the paging support feature is enable or not. Added to provide backward compatibility
- startIndex, indicate the starting index to return records for the RetrieveAll operation

Paging – Performance

- Better performance, in most cases customers just want to handle a page of records in one operation
- Lower memory and Bandwidth requirement, as the adapter just need to read specific number of records.
- Provide query optimization for DB2 and Oracle by using database specific solution, and relies on scrollable ResultSet to support for the other databases

Paging - EMD

- EMD wizard – EnablePaging, startIndex, and Number of records per page



Demonstrations

Summary

- Improving performance with HA Active-Active and Paging feature of WebSphere Adapter for JDBC
- Demonstrations
  - HA Active-Active Functionality
  - Paging Functionality

Additional WebSphere Product Resources

- Learn about upcoming WebSphere Support Technical Exchange webcasts, and access previously recorded presentations at:
  http://www.ibm.com/software/websphere/support/supp_tech.html
- Discover the latest trends in WebSphere Technology and implementation, participate in technically-focused briefings, webcasts and podcasts at:
  http://www.ibm.com/developerworks/websphere/community/
- Join the Global WebSphere Community:
  http://www.websphereusergroup.org
- Access key product show-me demos and tutorials by visiting IBM® Education Assistant:
  http://www.ibm.com/software/info/education/assistant
- View a webcast replay with step-by-step instructions for using the Service Request (SR) tool for submitting problems electronically:
  http://www.ibm.com/software/websphere/support/d2w.html
- Sign up to receive weekly technical My Notifications emails:
  http://www.ibm.com/software/support/einfo.html

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Questions and Answers