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Product Implementation Training (PIT)

IBM Content Platform Engine 5.2.1

09 – P8 521 - PE Case Insensitive Search and Large Log Sequence Number

Roadmap

- Case insensitive search
- Case insensitive search upgrade concerns
- Large log sequence number
- Large log sequence upgrade concerns

Case Insensitive Search (CIS) Background

- All CPE adhoc searches will need to retrieve data using database query, most CPE search predicates will be translated into SQL predicates.
- If the database server natively supports CIS, there is no need for CPE server to do anything.
- SQL server supports CIS.
- DB2 and Oracle do not seamlessly support CIS, thus needs current work.

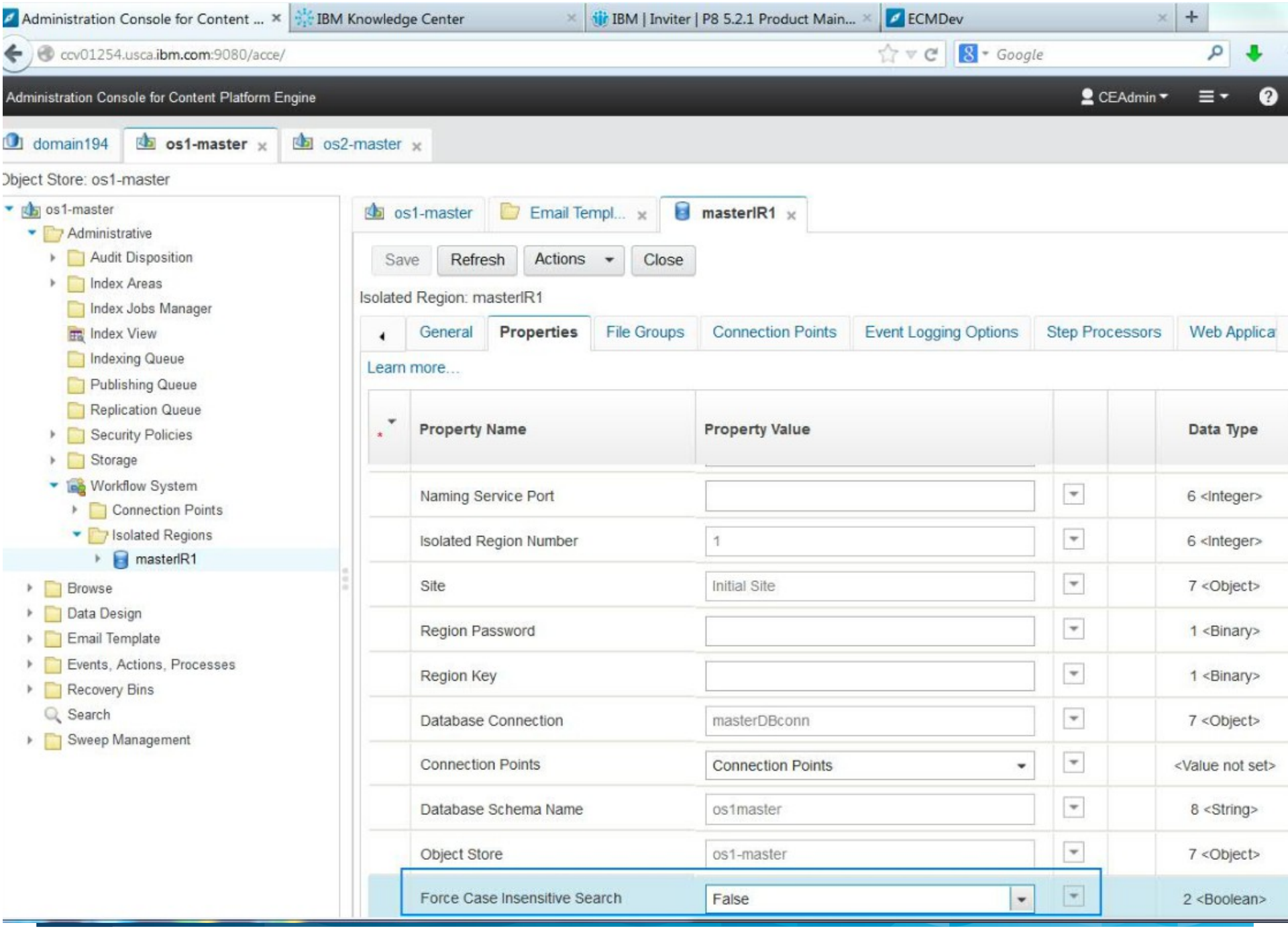
Case Insensitive Search

- PE CIS feature only supports queries on PE Queue, Roster and Log tables
- For DB2, only version 10.5 and above are supported in this PE feature. This is different from CE.
- To support CIS for DB2 and Oracle, PE needs to do two things in the server:

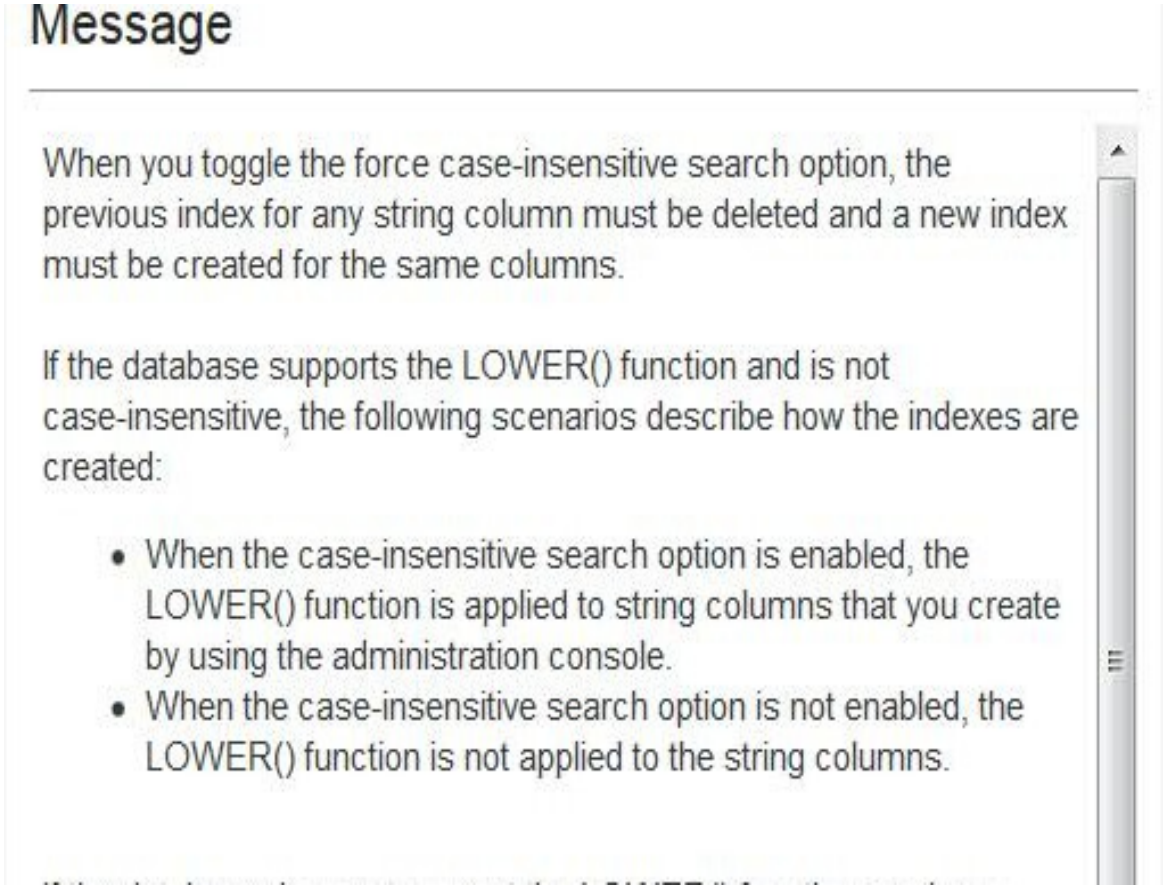
  - When creating index, add Lower() to the String column
    - *Create index <index_name> on <table> lower(str_column)*
  - When issuing the DB query
    - *select * from table where lower(str_col) = lower("str_val")*
    - *select * from table where lower(str_col) =lower(?)*

Enable/Disable CIS

- “forceCaseInsenstiveSearch” IsolatedRegion GCD object:
  - true/false indicates if CIS is enabled/disabled for this isolated region
  - If null, it will fall back to the ObjectStore's property of forceCaseInsenstiveSearch
  - If not specified at the ObjectStore level either, CIS is disabled


Administration Console for Content ...
IBM Knowledge Center
IBM | Inviter | P8 5.2.1 Product Main...
ECMDev
ccv01254.usca.ibm.com:9080/acce/
Google
Administration Console for Content Platform Engine
CEAdmin
domain194
os1-master
os2-master
Object Store: os1-master
os1-master
Administrative
Audit Disposition
Index Areas
Index Jobs Manager
Index View
Indexing Queue
Publishing Queue
Replication Queue
Security Policies
Storage
Workflow System
Connection Points
Isolated Regions
masterIR1
Browse
Data Design
Email Template
Events, Actions, Processes
Recovery Bins
Search
Sweep Management
os1-master
Email Templ...
masterIR1
Save
Refresh
Actions
Close
Isolated Region: masterIR1
General
Properties
File Groups
Connection Points
Event Logging Options
Step Processors
Web Applica
Learn more...
Property Name
Property Value
Data Type
Naming Service Port
6 <Integer>
Isolated Region Number
1
6 <Integer>
Site
Initial Site
7 <Object>
Region Password
1 <Binary>
Region Key
1 <Binary>
Database Connection
masterDBconn
7 <Object>
Connection Points
Connection Points
<Value not set>
Database Schema Name
os1master
8 <String>
Object Store
os1-master
7 <Object>
Force Case Insensitive Search
False
2 <Boolean>

When flipping value of forceCaseInsensitiveSearch flag, the following message pops up



Roadmap

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Upgrade for Case Insensitive Search

- CE will update existing PE IsolatedRegion object in the general GCD upgrading process. The new property of “forceCaseInsensitiveSearch” will default to null.
- If need to turn on the CIS on/off an existing IsolatedRegion, related DB index must be dropped and recreated. Currently upgrade does not handle this automatically.

Roadmap

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- Upgrade concerns for case insensitive search
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Large Log Sequence Number

- Integer sequence number in previous releases was limited to 2 billion and not enough for some customers.
- Since PE does not natively support Long integer, sequence number is now implemented as Double, stored in the database as double. This provides a 52-bit of integer which should be sufficient!

Large Log Sequence Number: API changes

- On server side, log sequence number is a double
- For compatibility with all existing applications, we still have (but deprecate) the current API method that returns integer
  - *VWLogElement.getSequenceNumber()* returns an integer
  - If underlying sequence number is larger than the Integer.MAX_VALUE, API will throw an exception with following message :

    "Sequence Number is greater than Integer.MAX_VALUE, 'getSequenceNumber()' is deprecated, replace with 'getSequenceNumberAsDouble()' "
- The method VWLogElement.getSequenceNumberAsDouble() returns a double, and should be used by all new applications
- Existing applications that directly call getFileldValue("F_SeqNumber") should expect to return a double now. This might break some applications unfortunately.

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64-Bit Log Sequence Number Upgrade

- No manual work is needed. When running PE upgrade, upgrade code will
  - Change the VWLog table and update the F_SEQNUMBER to the DOUBLE data type
  - Increase the Max value for the sequence number used for VWLog

Contacts

- Product Manager: Steve Hussey
- Subject Matter Experts (SME)/Area of Expertise:
  - Diane McPhee
  - Haibing Qiao

Product Help/Documentation/Resources

Links to the documentation

http://www.ibm.com/support/knowledgecenter/SSNW2F_5.2.1/com.ibm.p8.ce.a

http://www.ibm.com/support/knowledgecenter/SSNW2F_5.2.1/com.ibm.p8.pe.c