



IBM Software Group

IBM® WebSphere® Everyplace® Deployment V6 DB2 Everyplace Administration



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Agenda

- Mobile Device Administration Center (MDAC)
 - ▶ The Basics
 - ▶ What's New?
 - ▶ The future of MDAC

- XML Scripting
 - ▶ The Basics
 - ▶ What's New?



MDAC: The Basics

The screenshot shows the DB2 Mobile Devices Administration Center (MDAC) interface. On the left is a tree view with the following structure:

- Groups
- Users
- Subscription sets
 - Subscriptions**
- Adapters
- Servers
- Logs
 - All
 - Replication
 - Synchronization

The right pane displays a table titled "DB2EPM2 - DB2 - DSYCTLDB - Subscriptions" with the following data:

Name	Type	Description	Adapter	Sut
DSYCLIENTSTAT	Upload	Subscription...	DSYJDBC	
sub0069s1	JDBC		DSYJDBC	
sub0069s2	JDBC		DSYJDBC	

MDAC: The Basics (cont.)

- Groups
- Users (and devices)
- Subscription Sets
- Subscriptions
- Adapters
- Servers
- Logs



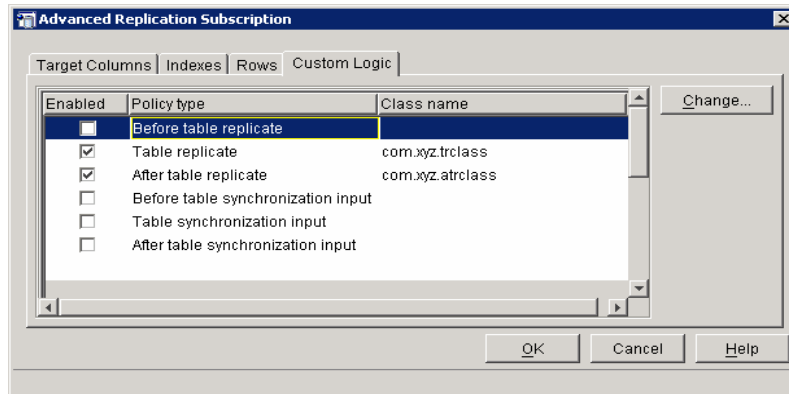
New with MDAC



- Custom Logic
- Logging Enhancements
- Reset/Remove devices
- DPropR support moved from MDAC to XML Scripting
- Client Trace Upload

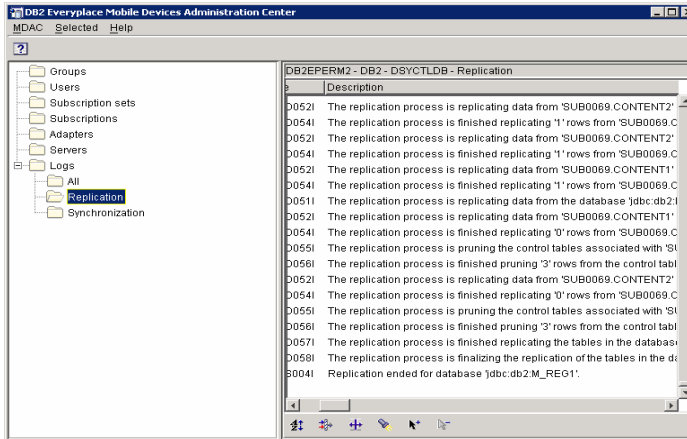
New with MDAC: Custom Logic

- New panels to support Custom Logic feature
- Write custom Java code to execute during synchronization and replication processes

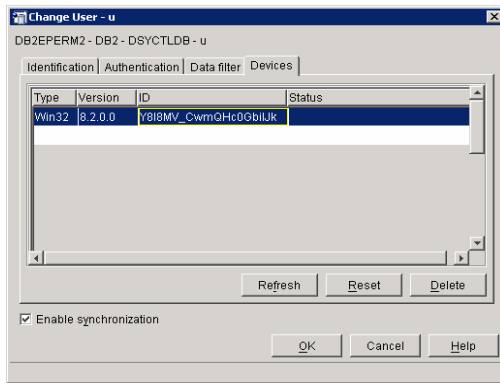


New with MDAC: Logging Enhancements

- Greater detail on replication status
 - Table level status and failure information
- Greater detail on synchronization status
 - Subscription level status and failure information



New with MDAC: Reset/Remove Devices



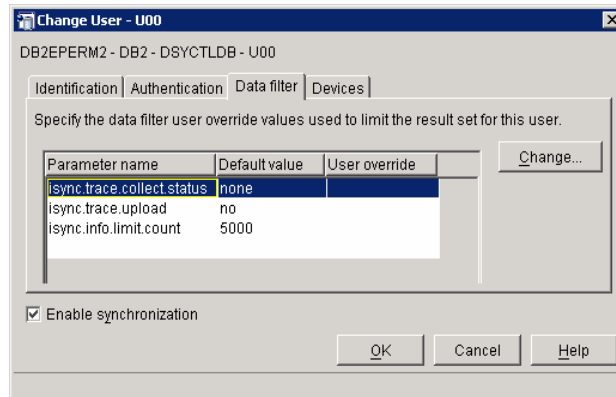
- 'Reset' behavior changed.
- Client device record not removed on reset.
- Use 'Delete' to associate a device to a different user.
- Use 'Reset' get a client back in sync after changing a filter parameter or if the client has worked with rows that out of its filter scope.

New with MDAC: DPropR support moved

- DPropR support has been fully integrated with XML Scripting to make these tasks easier.
- DPropR subscription support removed from MDAC due to discontinued support of UDB v7 on the Sync Server and MDAC's reliance on UDB CC v7 classes.

New with MDAC: Client Trace Upload

- Three new parameters created for all users.
 - ▶ `isync.trace.collect.status` (none,error,all) - detail level
 - ▶ `isync.trace.upload` (no,yes) - on/off switch
 - ▶ `isync.info.limit.count` (positive integer) - how many rows the client can send at one time



XML Scripting: Basics

- Do everything you can in MDAC...
- Except:
 - ▶ look at the logs
- Plus:
 - ▶ Set/view properties
 - ▶ Setup DPropR subscriptions
 - ▶ Prune mirror tables
 - ▶ Replicate



XML Scripting: Basics (cont.)

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE Root SYSTEM
  "file:/com/ibm/mobileservices/xmlscripting/mdas3.dtd">
<Root>
  <AddJdbcSubscription>
    <Name>sub0067s</Name>
    <Description></Description>
    <SubAdapter>DSYJDBC</SubAdapter>
    <EncryptionLevel>0</EncryptionLevel>
    <Block>N</Block>
    <MasterDb>jdbc:db2:REG1</MasterDb>
    <MasterDriver>COM.ibm.db2.jdbc.app.DB2Driver</MasterDriver>
    <MirrorDb>jdbc:db2:M_REG1</MirrorDb>
    <MirrorDriver>COM.ibm.db2.jdbc.app.DB2Driver</MirrorDriver>
  <AddTable>
    <TargetSchema>SUB0067</TargetSchema>
    <TargetTable>CONTENT1</TargetTable>
    <SourceSchema>SUB0067</SourceSchema>
    <SourceTable>CONTENT1</SourceTable>
    <DeleteAuth>Y</DeleteAuth>
    <InsertAuth>Y</InsertAuth>
    <UpdateAuth>Y</UpdateAuth>
    <SelectAuth>Y</SelectAuth>
  </AddTable>
  <WhereClauseMirrorToMobile></WhereClauseMirrorToMobile>
  <WhereClauseMasterToMirror>( bin1 &gt; 80 ) AND (bin1 &lt; 150)</WhereClauseMasterToMirror>
  <JoinFilter>G</JoinFilter>
  <Order>1</Order>
  <Encrypt>N</Encrypt>
  <AddColumn>
    <SourceColumn>AIN1</SourceColumn>
    <TargetColumn>AIN1</TargetColumn>
    <Subscribe>Y</Subscribe>
    <Replicate>Y</Replicate>
    <Key>Y</Key>
  </AddColumn>
  <AddColumn>
    <SourceColumn>BIN1</SourceColumn>
    <TargetColumn>BIN1</TargetColumn>
    <Subscribe>Y</Subscribe>
    <Replicate>Y</Replicate>
    <Key>N</Key>
  </AddColumn>
</AddTable>
</AddJdbcSubscription>
</Root>

```



XML Scripting: Basics (cont.)

- Use dsyadminxml.bat/sh to apply (-d) xml scripts or extract them (-x)
- When extracting xml scripts you can:
 - ▶ Generate Add/Remove tags corresponding to the objects in dsyctldb
 - ▶ Include/Exclude certain object types in your script
- `dsyadminxml.bat -x myfile.xml -include subs`
- `dsyadminxml.bat -d myfile.xml`



XML Scripting: What's New

- Simplified DPropR Support
- Replicate tag
- Prune tag
- Remove/Reset Changes
- Encrypted Password Support



New with XML Scripting: Simplified DPropR Support

- Requires DB2 UDB 8.2
 - All the DPropR setup can be done automatically - no more messing around with Replication Center
 - Old 'associate only' method still functions
 - Flexibility of selecting Tablespaces and Apply Qualifiers.
 - Still need to start Capture process manually on source.
- ```
<AddReplMaster
CreatedPropRControlTables="TRUE">
```
  - ```
<AddReplMirror  
CreatedPropRControlTables="TRUE">
```
 - ```
<AddDpropRSubscription
Replicate="FALSE"
SetupDPropRSourceAndMirror="TRUE">
```



## New with XML Scripting: Replicate Tag

```
<ReplicateMirror Timeout="60">
 <Database>jdbc:db2:SRCDB</Database>
</ReplicateMirror>
```

- Allows replication to be performed while executing XML Script.
- Alternative to dsyreplicate.bat/sh
- Timeout attribute is maximum number of seconds to wait to start replicating (in case replication is already being performed).



## New with XML Scripting: Prune Mirror Tables

```
<PruneMirror PruneAll="TRUE"/>
<PruneMirror PruneAll="FALSE">
 <Database>jdbc:db2:MRRDB</Database>
</PruneMirror>
```

- New mirror table, DSY.EHxxxx, (Extended History) introduced in DB2 Everyplace Version 8.2
- Can grow rather large in some circumstances
  - ▶ Large volatility of data
  - ▶ Long delays between device synchronization
- Normally pruned periodically in the Sync Server, but additional pruning may be desired
  - ▶ After resetting/deleting a number of devices
  - ▶ Before performing some sort of database maintenance



## New with XML Scripting: Reset/Remove Devices

```
<ResetDevice><Id>_mWkRSup19j9jBYWr4jg</Id></ResetDevice>
<RemoveDevice><UserName>user1</UserName></RemoveDevice>
<RemoveDevice><Id>_mWkRSup19j9jBYWr4jg</Id></RemoveDevice>
```

- Same reasons as with MDAC.
- The terminology is different but the action is the same. XML Scripting has RemoveDevice instead of Delete.



## New with XML Scripting: Encrypted Password Support

```
<AddJdbcMaster>
 <Database>jdbc:db2:REG1</Database>
 <Driver>COM.ibm.db2.jdbc.app.DB2Driver</Driver>
 <UserId>db2admin</UserId>
 <Password
 Encryption="DSY">Qm1UOzeUngArzGq1xptlhA==</Password>
</AddJdbcMaster>
```

- Allows passwords to be entered as encrypted values instead of clear text.
- Default when script is generated with -x option.
- Get your own encrypted passwords for use in XML Scripts with dsyencrypt.bat/sh utility.
- Security by obscurity.



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