

IBM Tivoli Software



## IBM Tivoli Directory Server 6.0 - Replication

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Using the **idsldapexop** extended operation command

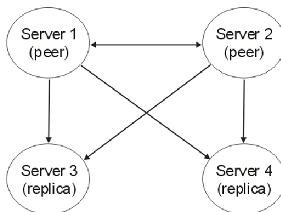
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## LDAP Extended Operations - `idsldapexop`

- Anything that can be done from the WebAdmin can be done in some way via command line. One of the utilities we use for command line replication is: `idsldapexop`
- Documentation on the command:  
<http://publib.boulder.ibm.com/infocenter/tivihelp/v2r1/topic/com.ibm.IBMDS.doc/progref05.htm#idx65>



## LDAP Extended Operations

- A very useful **ldapsearch** command with available replication related operational attributes: This gives the current status and info about the replication agreement.

```
ldapsearch -h hostName -p 389 -D cn=root -w <password> -b  
<ReplicationAgreement> objectclass=* ibm-replicationIsQuiesced ibm-  
replicationLastActivationTime ibm-replicationLastChangeId ibm-  
replicationLastFinishTime ibm-replicationLastGlobalChangeId ibm-  
replicationLastResult ibm-replicationLastResultAdditional ibm-replicationNextTime  
ibm-replicationPendingChangeCount ibm-replicationPendingChanges ibm-  
replicationState ibm-replicationThisServerIsMaster ibm-  
replicationFailedChangeCount ibm-replicationFailedChanges
```

e.g.: You can use any of the above mentioned operational attributes as necessary.

```
ldapsearch -h peer1 -p 389 -D cn=root -w <password> -b  
cn=peer2:389,cn=peer1:389,ibm-replicaGroup=default,O=IBM,C=US  
objectclass=* ibm-replicationState
```

IBM Tivoli Directory Server – ITDS 6.0 Replication

## Queue Control with an extended op

**Idapexpop - cascading control replication extended operation:**

The requested action is applied to the specified server and also passed along to all replicas of the given subtree.  
If any of these are forwarding replicas, they pass the extended operation along to their replicas. The operation cascades over the entire replication topology.

```
Idapexpop -h hostName -D cn=root -w <password> -op cascrepl -action {quiesce | unquiesce | replnow | wait} -rc <ReplicationContext>
```

Where <action> can be one of the four values:

- quiesce - No further updates are allowed, except by replication.
- unquiesce - Resume normal operation, client updates are accepted.
- replnow - Replicate all queued changes to all replica servers as soon as possible, regardless of schedule.
- wait - Wait for all updates to be replicated to all replicas.

e.g.:

```
Idapexpop -h hostName -D cn=root -w <password> -op cascrepl -action quiesce -rc O=IBM,C=US
```

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## Skipping blocking entries with an extended op

### **ldapexop - control queue extended operation:**

```
ldapexop -h hostName -D cn=root -w <password> -op controlqueue -skip  
{all | change-id} -ra <ReplicationAgreement>
```

Where "all" indicates to skip all pending changes for this agreement and "change-id" identifies the single change to be skipped. If the server is not currently replicating this change, the request fails.

e.g.:

```
ldapexop -h hostName -D cn=root -w <password> -op controlqueue -skip  
all -ra cn=peer2:389,cn=peer1:389,ibm-  
replicaGroup=default,O=IBM,C=US
```

## Suspending the queue

### **Idapexop - control replication extended operation:**

```
Idapexop -h hostName -D cn=root -w <password> -op controlrepl -  
action {suspend | resume | replnow} {-rc <ReplicationContext> | -  
ra <ReplicationAgreementD>}
```

If -rc <ReplicationContext> is provided then the action is performed  
for all agreements for this context.

e.g.:

```
Idapexop -h hostName -D cn=root -w <password> -op controlrepl -  
action suspend -ra cn=peer2:389,cn=peer1:389,ibm-  
replicaGroup=default,O=IBM,C=US
```

## Controlling

### **ldapexop - control replication error extended operation:**

```
ldapexop -h hostName -D cn=root -w <password> -op  
controlreplerr {[-delete failure-ID | all] | [-retry failure-ID | all] | [-  
show failure-ID]} -ra <ReplicationAgreement>
```

Where either of -delete, -retry or -show must be specified with appropriate failure-ID.

e.g.:

```
ldapexop -h hostName -D cn=root -w <password> -op  
controlreplerr -delete all -ra cn=peer2:389,cn=peer1:389,ibm-  
replicaGroup=default,O=IBM,C=US
```

## Quiesce or Unquiesce the queue

### **Idapexop: quiesce or unquiesce subtree extended operation:**

```
Idapexop -h hostName -D cn=root -w <password> -op quiesce [-end] -rc <ReplicationContext>
```

If -end is specified the ReplicationContext gets unquiesced.

e.g.:

```
Idapexop -h hostName -D cn=root -w <password> -op quiesce -rc O=IBM,C=US
```

The Idapexop to push your replication topology

**Idapexop: replication topology extended operation - replicates the replication topology related entries under the specified context:**

```
Idapexop -h hostName -D cn=root -w <password> -op repltopology -rc <ReplicationContext> [-ra <ReplicationAgreement>] [-timeout secs]
```

e.g.:

```
Idapexop -h hostName -D cn=root -w <password> -op repltopology -rc O=IBM,C=US -ra cn=peer2:389,cn=peer1:389,ibm- replicaGroup=default,O=IBM,C=US -timeout 60
```

For more details refer to Admin guide.



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