

Replication Job Report Output

May 2003

What does the output from a Replication job report tell me?

Starting Replication Operation (Version 4.0/4.1.0): 04/29/2002 10:01:19 AM – *This is the version of the Replication job code, not the Documentum Server version.*

Parameters to Replication Job:

Master Docbroker: lepidus – *Hostname of the machine where source DocBroker is located.*

Master Docbase: test_source – *Name of source Docbase*.

Master Server Name:

Master User: dmadmin – *User that will run operations on source Docbase*.

Master User Domain:

Master Folder: /source/TestReplica – All subfolders & objects under here will be replicated to the target.

Replica Docbroker: lepidus – Hostname of the machine where target DocBroker is located. In this example, both Docbases are using the same DocBroker. This is not a requirement for replication. If you want the ability to edit or refresh replicas, both Docbases must project to the same DocBroker.

Replica Docbase: test_target – *Name of target Docbase*.

Replica Server Name:

Replica User: dmadmin - *User that will run operations on target Docbase*.

Replica Folder: /target – Folder path on target Docbase where all replicas will reside. This folder path must exist prior to running the replication job.

Replica Owner: target_user – Depending on the job's security mode settings, this could be the name of user on target Docbase that will own all objects replicated using this job.

Replica ACL: Global User Default ACL – Depending on the job's security mode settings, this ACL could be applied to all objects that are replicated using this job.

Replica ACL domain:

Replica Storage Area: replica_filestore_01 - Depending on the job's security mode settings, all objects replicated using this job could be stored in this storage area.

Fast Replication: F-Determines whether or not (with the exception of annotations), related objects will be considered for replication. See Chapter 1 of the Distributed Configuration Guide for more details.

Code Page: UTF-8 - This identifies the session codepage. When the replication job opens a session to do the dump/load operations, it will set the session codepage to the codepage specified here. For docbases 4.2 and higher, this should be UTF8 if the source and target Docbases reside in Databases with different codepages. If replicating from pre-4.2 docbase, should be set to the codepage of the source database.

Replication Mode: ExternalReplication – This controls how the job handles security and content storage. It's used in conjunction with the Replication Option. See Chapter 1 of the Distributed Configuration for a description of all possible settings.

Replication Option: PreserveSecurity – When using PreserveSecurity in conjunction with ExternalReplication mode, the owner_name on the replicas will be set to the Replica Owner value but the same ACL will be applied, if the ACL exists in the target Docbase. If the same ACL doesn't exist, the ACL that's specified in Replica ACL will be applied to the replicas. Also the content of the replica objects will be stored in the same storage area if the same storage area exists in the target Docbase. If the same storage area doesn't exist, the content will be stored in storage area that's specified in the Replica Storage Area. See Chapter 1 of the Distributed Configuration Guide for more details.

Fulltext Enabled:

Replicate Annotations:T

Full Refresh: F – Determines whether a full refresh or incremental replication will take place. Note: If the replication_date value for this job in dm_replication_events is not equal to the value for a_retention_date on the job object, a full refresh replication will take place regardless if full_refresh is set to F. This is also the case if there is no row in dm_replication_events for this job. Also, when the replication job has never been run before, it will always be a full refresh even if this flag is set to false.

Fast Replication: F

Manual Data Transfer: F – Determines whether the dump file will be moved manually or automatically to the target machine.

Transfer Operator: - If Manual Data Transfer is set to T, this must be set to the user name that will receive an email, listing the location of the dump file & delete synchronization file & an explanation of where to place the file on the target machine.

Restart On Failure: F Restart Interval:

Method Trace Level: 0 -

Job Identifier: $080c9fda80014c43 - The \ r_object_id \ value \ of the \ dm_job \ object \ that \ represents \ this \ replication job. Use this value to determine if the job is a push or pull replication job. If the job is created in the source Docbase, then it's a push job, if the job is created in the target Docbase, then it's a pull job. The <math>3^{rd}$ through 8^{th} values, represent the Docbase ID in hex. In this example, 0c9fda translated to decimal is 827354 (which is the Docbase ID of the source Docbase), therefore, this is a push job. Note that It's possible for the job docbase to be a third docbase that doesn't match the source or the target.

Job object_id: 080c9fda80014c43

Previous Replication: 4/29/2002 09:54:53 – *Last time this replication job ran*.

PHASE 1:

Unload of Source Docbase In Progress.: 04/29/2002 10:01:20 AM – This is where the job determines what needs to be replicated. All objects that have been replicated are stored in dm_replica_catalog on the source Docbase. The dm_replica_catalog keeps track of the r_object_id and the i_vstamp values of the object at the time it was replicated. During an incremental replication job, the Server compares the i_vstamp value of the object in dm_sysobject to it's i_vstamp value in dm_replica_catalog, if the i_vstamp value in dm_sysobject is greater than the i_vstamp value in dm_replica_catalog, this means that the object has been changed since the last time the replication job ran & needs to be re-replicated. If the object exists in dm_sysobject but doesn't exist in dm_replica_catalog, this means that the object was created since the replication job ran & it needs to be replicated. A row will be inserted into dm_replica_catalog for that object. Once the job finds everything that needs to be replicated, it uses the Documentum dump utility to dump the objects into a dump file. During push replication, when the dump completes, a document is created on the target & the dump file is transferred to the target machine using a getfile then set as content to that document using setfile.

Delete Synchronization of Source Docbase in Progress.: 04/29/2002 10:01:29 AM – This is where the job determines which objects were deleted on the source Docbase & therefore need to be deleted on the target Docbase. This is determined by comparing the objects in dm_replica_catalog with the objects in the type tables. If an object exists in dm_replica_catalog but not in the tables, it needs to be deleted from the target Docbase. This information is stored in the dm_replica_delete_info table and a separate file is created that contains the ids (the delete synchronization file) (Information about deleted objects is stored on source with pull replication & on the target with push replication.)

PHASE 2:

Transferring Replicate Data.: 04/29/2002 10:01:29 AM – During pull replication the dump file is transferred to the target Docbase here. Also the delete synchronization file is transferred to the dm_replicate_delete_info table on the target. During push replication the dump file & delete synch. file already exist in the target Docbase because it transferred during Phase 1.

PHASE 3:

Transfer of Data Complete: Processing Replicate Data.: 04/29/2002 10:01:29 AM Delete Synchronization of Target Docbase in Progress.: 04/29/2002 10:01:35 AM – *The replicas are deleted that need to be deleted on the target. During full refresh replication, all replicas are deleted from the target Docbase.*

Load of Target Docbase in Progress.: 04/29/2002 10:01:35 AM - The replicas are loaded into the target Docbase using the Documentum load utility. Note that the load used here uses special replication-only internal flags.

Cleaning up after Replication Operation.: 04/29/2002 10:01:35 AM –Replicate Operation Complete.: 04/29/2002 10:01:39 AM – The a_retention_date attribute in the job object is set to the reflect the date that replication was successfully executed. This date comes from time that the dump was executed on the source. Also catalog information is cleaned up for the previous replication run – this occurs on the source. During push replication, the dump document is removed also.

Number of Objects Replicated: 9 – *This value based on number of objects in dump file.*

Number of Objects Deleted: 0 Size of Dump File (in Kbytes): 19.656