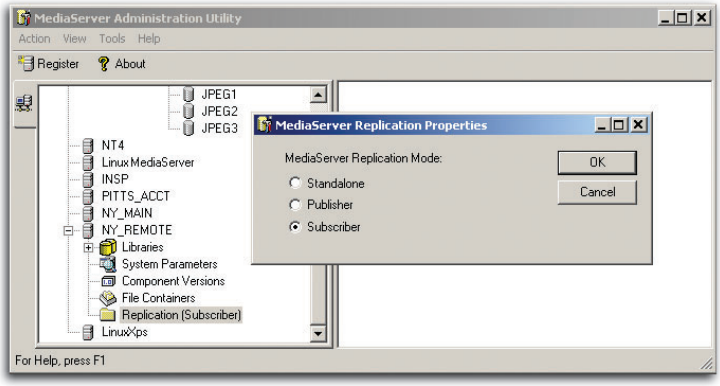
The Software Construction Company

SCC MediaServer™ Replication Module

SCC MediaServer, as a mission-critical system, provides sophisticated options for fault tolerance and disaster recovery. The Replication Module is one such option and is used to create full off-site replication of critical MediaServer database tables, user account definitions, and full-text indexes.

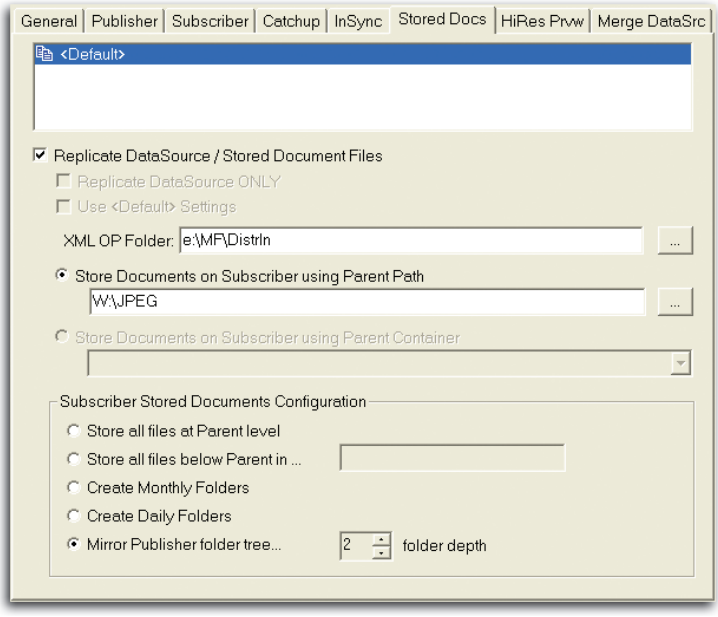
The SCC MediaServer Replication Module uses a Publish-Subscribe model for distributing data. One or more Subscriber servers are connected via local or wide area network to the publisher.

The Publisher is the primary MediaServer system and is the source of the data to be replicated. The Subscriber is a separate MediaServer system that receives the data being replicated from the Publisher.



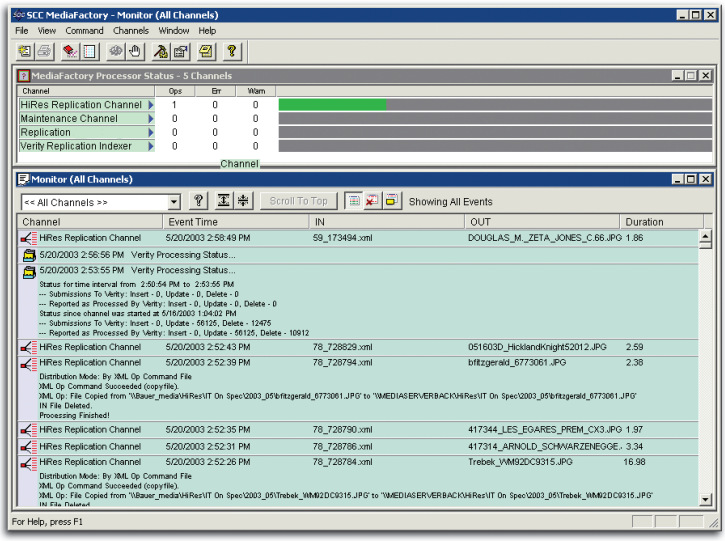
In the event that the Publisher MediaServer becomes inaccessible, one of the Subscriber MediaServers can easily be promoted to become the new primary server taking on the role of the Publisher.

The Replication Module distributes Publisher data to each Subscriber so that new insertions, object updates, stored documents, user account additions and changes, project changes, and library definitions on the Publisher are reflected in the state of each Subscriber.



The work engine behind the Replication Module is the Replication Channel in SCC MediaFactory. The channel monitors changes in the Publisher to ensure that the Subscriber state is maintained as a near real-time copy. Stored documents, such as image, graphics, and PDF page files, are replicated as an option in the channel settings.

Replication is performed as a 'lazy' (delayed) operation so that replication work does not interfere with the timing and performance of the Publisher's normal operations. For example, if a Publisher must update two records, it does not have to wait for the first update to be replicated before the second update is begun. Instead, changes on the Publisher are marked and recorded as they occur and in the order they occur. The Replication Channel uses this information like a script to maintain Subscriber state without having to write to the Publisher database and with little or no impact on Publisher performance. In fact, the MediaFactory channel itself can run on the Subscriber, further isolating and minimizing its impact on the Publisher.



At any time, the Replication Channel can be stopped and later can be restarted to resume its operations, independently for each Subscriber.

High resolution files (stored documents) are also copied to the Subscriber using a 'lazy' (delayed) operation, and this can be configured for near immediate, delayed, or scheduled timing. Any file transfer failures, such as due to network problems, are easily retried at a later time.

Administrative functions for the Replication Module are contained in the MediaServer Administration Utility. This utility automatically detects the server mode (Standalone, Publisher, or Subscriber). For Publishers, the utility will list available subscribers and allow registration of new subscribers to the publisher. For Subscribers, the utility will list the server's libraries so that the administrator can select which libraies are to be replicated, and then it will verify compatibility of the selected libraries with the Publisher's libraries.

3810 Hamby Road • Alpharetta, Georgia (USA) 30004 • Voice: 770.751.8500 • Fax: 770.772.6800 • Web Site: http://www.swcc.com