This document describes the ssh/rsync based replication available since Solr1.1. This mechanism only works on systems that support removing open hard links.

⚠️ These Scripts were superseded by the Replication-Handler Java implementation of index replication that works over HTTP and was introduced in Solr1.4, and are no longer actively maintained. ⚠️

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### basic Solr scripts

These scripts are used to manage the index data on the Solr server:

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>abc</td>
<td>Atomic Backup post-Commit tells the Solr server to perform a commit. A snapshot of the index directory is made after the commit if the Solr server is configured to do so (by enabling the postCommit event listener in solr/conf/solrconfig.xml). A backup of the most recent snapshot directory is then made if the commit is successful. Backup directories are named backup.yyyymmdddHHMMSS where yyyymmdddHHMMSS is the timestamp of when the snapshot was taken.</td>
</tr>
<tr>
<td>abo</td>
<td>Atomic Backup post-Optimize tells the Solr server to perform an optimize. A snapshot of the index directory is made after the optimize if the Solr server is configured to do so (by enabling the postCommit or postOptimize event listener in solr/conf/solrconfig.xml). A backup of the most recent snapshot directory is then made if the optimize is successful. Backup directories are named backup.yyyymmdddHHMMSS where yyyymmdddHHMMSS is the timestamp of when the snapshot was taken.</td>
</tr>
<tr>
<td>backup</td>
<td>Backup the index directory using hard links. Backup directories are named backup.yyyymmdddHHMMSS where yyyymmdddHHMMSS is the timestamp of when the backup was taken.</td>
</tr>
<tr>
<td>backupcleaner</td>
<td>Runs as a cron job to remove backups more than a configurable number of days old or all backups except for the most recent n number of backups. Also can be run manually.</td>
</tr>
<tr>
<td>commit</td>
<td>Issues a commit to the Solr server. This will also cause a snapshot to be created if the Solr server is configured to take a snapshot after a commit (by enabling the postCommit event listener in solr/conf/solrconfig.xml).</td>
</tr>
<tr>
<td>optimize</td>
<td>Issues an optimize to the Solr server. Note: Optimization may take up to several minutes depending on the size of the index. This will also cause a snapshot to be created if the Solr server is configured to take a snapshot after an optimize (by enabling the postCommit or postOptimize event listener in solr/conf/solrconfig.xml).</td>
</tr>
<tr>
<td>readercycle</td>
<td>Tells the Solr server to close its current reader and open a new one. This has the effect of making any recent updates and deletions visible to the new reader.</td>
</tr>
</tbody>
</table>

**abc**

```bash

- h specify Solr hostname (defaults to localhost)
- p specify Solr port number
- w specify name of Solr webapp (defaults to solr)
- u specify user to sudo to before running script
- U specify full update url (overrides -h,-p,-w parameters)
- d specify directory holding index data (defaults to data)
- v increase verbosity
- V output debugging info
```
### abo


- `-h` specify Solr hostname (defaults to localhost)
- `-p` specify Solr port number
- `-w` specify name of Solr webapp (defaults to solr)
- `-u` specify user to sudo to before running script
- `-U` specify full update url (overrides -h,-p,-w parameters)
- `-d` specify directory holding index data (defaults to data)
- `-v` increase verbosity
- `-V` output debugging info

### backup

**usage:** backup [-d dir] [-u username] [-v]

- `-d` specify directory holding index data
- `-u` specify user to sudo to before running script
- `-v` increase verbosity
- `-V` output debugging info

### backupcleaner

**usage:** backupcleaner -D <days> | -N <num> [-d dir] [-u username] [-v]

- `-D <days>` cleanup backups more than <days> days old
- `-N <num>` keep the most recent <num> number of backups and cleanup up the remaining ones that are not being pulled
- `-d` specify directory holding index data
- `-u` specify user to sudo to before running script
- `-v` increase verbosity
- `-V` output debugging info

### commit

**usage:** commit [-h hostname] [-p port] [-w webapp_name] [-u username] [-U url] [-v] [-V]

- `-h` specify Solr hostname (defaults to localhost)
- `-p` specify Solr port number
- `-w` specify name of Solr webapp (defaults to solr)
- `-u` specify user to sudo to before running script
- `-U` specify full update url (overrides -h,-p,-w parameters)
- `-v` increase verbosity
- `-V` output debugging info

### optimize

**usage:** optimize [-h hostname] [-p port] [-w webapp_name] [-u username] [-U url] [-v] [-V]

- `-h` specify Solr hostname (defaults to localhost)
- `-p` specify Solr port number
- `-w` specify name of Solr webapp (defaults to solr)
- `-u` specify user to sudo to before running script
- `-U` specify full update url (overrides -h,-p,-w parameters)
- `-v` increase verbosity
- `-V` output debugging info

### readercycle
Solr collection distribution scripts

These scripts are run on the master and slave Solr servers to

- create and deliver snapshots from the master to the slave(s)
- install snapshot on the slave(s)
- report distribution statistics and status from slave(s) to master

They are documented in SolrCollectionDistributionScripts.