NetarchiveSuite 7.x Release Notes

- Highlights in 7.5
- Highlights in 7.4.4
- Highlights in 7.4.3
- Highlights in 7.4.2
- Highlights in 7.4.1
- Highlights in 7.4
- Highlights in 7.3
- Highlights in 7.2
- Highlights in 7.1
- Highlights in 7.0
- Upgrading From Previous NetarchiveSuite Releases
- Issues Resolved in Release 7.0

7.0 Release Date: 2021-03-19

7.1 Release Date: 2021-07-06

7.2 Release Date: 2021-08-19

7.3 Release Date: 2022-01-31

7.4 Release Date 2022-07-15

7.4.1 Release Date 2022-08-08

7.4.2 Release Date 2022-09-05

7.4.3 Release Date 2022-10-03

7.4.4 Release Date 2022-12-22

7.5 Release Date 2023-09-07

Highlights in 7.5

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>T</th>
<th>Created</th>
<th>Updated</th>
<th>Due</th>
<th>Assignee</th>
<th>Reporter</th>
<th>P</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAS-2891</td>
<td>Improve H3 parser</td>
<td>🆆</td>
<td>Jul 31, 2023</td>
<td>Sep 07, 2023</td>
<td>Unassigned</td>
<td>Sara Aubry</td>
<td></td>
<td></td>
<td>RESOLVED</td>
<td>Fixed</td>
</tr>
<tr>
<td>NAS-2890</td>
<td>Extend job IDs search on Harvest Status page</td>
<td>🆆</td>
<td>Jul 28, 2023</td>
<td>Sep 07, 2023</td>
<td>Unassigned</td>
<td>Sara Aubry</td>
<td></td>
<td></td>
<td>RESOLVED</td>
<td>Fixed</td>
</tr>
<tr>
<td>NAS-2889</td>
<td>Give the possibility to hide domain specific crawler traps</td>
<td>🆆</td>
<td>Jul 28, 2023</td>
<td>Sep 07, 2023</td>
<td>Unassigned</td>
<td>Sara Aubry</td>
<td></td>
<td></td>
<td>RESOLVED</td>
<td>Fixed</td>
</tr>
<tr>
<td>NAS-2887</td>
<td>Proposal to add a new Crawler Traps type in NAS</td>
<td>🆆</td>
<td>Jun 26, 2023</td>
<td>Sep 07, 2023</td>
<td>Unassigned</td>
<td>Sara Aubry</td>
<td></td>
<td></td>
<td>RESOLVED</td>
<td>Fixed</td>
</tr>
<tr>
<td>NAS-2886</td>
<td>Modify budget of several domains /hosts simultaneously</td>
<td>🆆</td>
<td>Jun 20, 2023</td>
<td>Sep 07, 2023</td>
<td>Unassigned</td>
<td>Sara Aubry</td>
<td></td>
<td></td>
<td>RESOLVED</td>
<td>Fixed</td>
</tr>
</tbody>
</table>

5 issues

Highlights in 7.4.4

Download Links for NetarchiveSuite 7.5:
- Download NetarchiveSuite
- Download Heritrix 3 Bundle (required)
- Javadoc
docker-compose assembly
- Manuals
- OpenWayback Overlay warfile
Fixed an issue causing hadoop jobs to fail on extraction of very large crawl-logs.

Highlights in 7.4.3

- Fixed NAS-2884 - Getting issue details...

Highlights in 7.4.2

- A bugfix for a slightly mysterious intermittent failure to create deduplication indexes using hadoop.
- Default seedlists for new domains now include "https://" and url's both with and without www so "foobar.dk" has a seedlist

http://foobar.dk
http://www.foobar.dk
https://foobar.dk
https://www.foobar.dk

Highlights in 7.4.1

- This version fixes a bug in the implementation of

  NAS-2876 - Getting issue details...

Highlights in 7.4

- The CrawlRSS module has been updated to be compatible with the current version of heritrix.
  See documentation - RSS Harvests.
- Fixed various issues with caching in hdfs

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>T Created</th>
<th>Updated</th>
<th>Due</th>
<th>Assignee</th>
<th>Reporter</th>
<th>P</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAS-2883</td>
<td>Get better performance for the History list per harvestid in the GUI</td>
<td>Jul 05, 2022</td>
<td></td>
<td>Aug 08, 2022</td>
<td>Unassigned</td>
<td>Sara Aubry</td>
<td>C</td>
<td>CLOSED</td>
<td>Fixed</td>
</tr>
<tr>
<td>NAS-2882</td>
<td>Add the possibility to delete all configuration s from a Harvest</td>
<td>Jun 14, 2022</td>
<td></td>
<td>Jul 15, 2022</td>
<td>Unassigned</td>
<td>Sara Aubry</td>
<td>C</td>
<td>CLOSED</td>
<td>Fixed</td>
</tr>
<tr>
<td>NAS-2881</td>
<td>Distinguish queues types on Progression and Queues page</td>
<td>Jun 14, 2022</td>
<td></td>
<td>Aug 08, 2022</td>
<td>Unassigned</td>
<td>Sara Aubry</td>
<td>C</td>
<td>CLOSED</td>
<td>Fixed</td>
</tr>
<tr>
<td>NAS-2879</td>
<td>Fix on the possibility to use a regex with a backslash on Browse /Delete frontier</td>
<td>Jun 14, 2022</td>
<td></td>
<td>Aug 08, 2022</td>
<td>Unassigned</td>
<td>Sara Aubry</td>
<td>C</td>
<td>CLOSED</td>
<td>Fixed</td>
</tr>
<tr>
<td>NAS-2878</td>
<td>Fix on Add RejectRules on a running job</td>
<td>Jun 14, 2022</td>
<td></td>
<td>Aug 08, 2022</td>
<td>Unassigned</td>
<td>Sara Aubry</td>
<td>C</td>
<td>CLOSED</td>
<td>Fixed</td>
</tr>
</tbody>
</table>
Highlights in 7.3

1. Fixed a bug in the bitmagasin logic used by WaybackIndexer to fetch all filenames
2. Made fetching of hadoop results from hdfs pipe directly to disk, thereby avoiding potential OutOfMemory issue
3. Refactored the hadoop version of the CDX-indexing workflow
4. Added a number of upstream fixes to heritrix, including one to fix unwanted behaviour when a url redirects to a top-level-domain
5. Added two new settings parameters to make FileResolver more robust in the event of server instability.

```java
/**
 * Number of retries for fileresolver if an empty result is obtained
 * (0 = try only once). default 3.
 */
public static String FILE_RESOLVER_RETRIES = "settings.common.
fileResolver.retries";

/**
 * Seconds to wait between retries. default 5.
 */
public static String FILE_RESOLVER_RETRY_WAIT = "settings.common.
fileResolver.retrywaitSeconds";
```

Highlights in 7.2

1. Fixed NAS-2868 - Getting issue details... so that the version of Heritrix reported in all archive and metadata files is correct and consistent.
2. Included all Heritrix patches up to the 2021-08-03 Interim Release, as well as a number of even more recent minor bugfixes. This upgrade includes as a major new feature the ExtractorChrome module which enables browser-based harvesting from directly within the Heritrix extractor chain. To enable browser-based harvesting, add a bean like this

```xml
<bean id="extractorChrome" class="org.archive.modules.extractor.
ExtractorChrome">
    <property name="executable" value="/usr/bin/google-chrome"/>
</bean>
```

3. ExtractorSitemap has been modified with two optional properties:
if "urlPattern" is set then any url matching this pattern is assumed to be a sitemap. Otherwise ExtractorSitemap reverts to its default functionality whereby it checks the mime-type of every url and then sniffs the start of any xml url to see if it looks like a sitemap. If "enableLenientExtraction" is set to true then every url found in the sitemap will be extracted. Otherwise the extractor will omit any urls which do not obey the scoping rules defined in the site
map specification.

Highlights in 7.1

1. Fixed (after many years) whereby all
   generated revisit-records had badly formatted WARC-Payload-Digest fields and were therefore
   invalid according to the Warc standard.
2. Added 3 new link extractors (from the British Library) to heritrix:
   - org.archive.modules.extractor.ExtractorRobotsTxt
   - org.archive.modules.extractor.ExtractorSitemap
   - org.archive.modules.extractor.ExtractorJson
   Note that ExtractorSitemap deviates slightly in functionality from the British Library
   version in that it is considerably more lenient in both what it identifies as a sitemap and
   what Urls it accepts in sitemaps.
3. Added caching of crawl logs and metadata-indexes when hadoop is used for processing
   a. The new caching functionality for crawl logs and metadata indexes stores data in a
directory specified by the setting

   settings.common.webinterface.metadata_cache_dir

   whose default value is "metadata_cache" (relative to the current working directory
   where the GUIApplication is started). At present there is no automatic cleaning of this
directory.
4. Added retry functionality to improve the robustness of the WarcRecordClient
5. Fixed a bug whereby files uploaded from a harvester were not being deleted when the
   Bitrepository backend is in use
6. Added retry-handling to Bitrepository uploads via two new settings keys under settings.common.
   arcrepositoryClient.bitrepository

   <store_retries>3</store_retries>
   <retryWaitSeconds>1800</retryWaitSeconds>

7. Added parameters to manage memory and core usage in hadoop mapper-only jobs

   settings.common.hadoop.mapred.mapMemoryMb
   settings.common.hadoop.mapred.mapMemoryCores

8. Added support for uberized jobs, optimised for small tasks in hadoop, via

   settings.common.hadoop.mapred.enableUbertask

9. Added hdfs-caching functionality to hadoop jobs. When this feature is enabled, any local files
   passed as input to the hadoop job are first copied into hdfs and cached for future use. This
   should create savings when the same file is processed multiple times, as is often the case for
   metadata files. This functionality is controlled by the following parameters

   settings.common.hadoop.mapred.hdfsCacheEnabled
   settings.common.hadoop.mapred.hdfsCacheDir
   settings.common.hadoop.mapred.hdfsCacheDays
Note that if the cache is enabled but the "hdfsCacheDays" parameter is set to zero then files are still copied into hdfs before processing but are deleted and recopied each time they are used. This can be useful for benchmarking.

10. Added parameters to determine which hadoop mapreduce job queue is used for different jobs. Currently two possibilities are allowed for:

| settings.common.hadoop.mapred.queue.batch |
| settings.common.hadoop.mapred.queue.interactive |

"Interactive" is used for jobs started by GUI operations and "batch" for all other jobs. By assigning these to different hadoop queues, each with a non-zero minimum quota, one can ensure that interactive jobs do not have to wait indefinitely while batch jobs are being processed.

11. Improved the performance of the GUI functionality associated with the button "Browse only relevant crawl-log lines for this domain".

**Highlights in 7.0**

NetarchiveSuite 7.0 introduces an entirely new backend storage and mass-processing implementation based on software from bitrepository.org and hadoop. The new functionality is enabled by defining the following key in the settings file for all applications:

```xml
<settings>
  <common>
    <arcrepositoryClient>
      <class>dk.netarkivet.archive.arcrepository.distribute.BitmagArcRepositoryClient</class>
    </arcrepositoryClient>
  </common>
</settings>
```

and additionally

```xml
<settings>
  <common>
    <useBitmagHadoopBackend>true</useBitmagHadoopBackend>
  </common>
</settings>
```

The older arcrepositoryClient implementation `dk.netarkivet.archive.arcrepository.distribute.JMSArcRepositoryClient` will be deprecated in future releases. (The developers are unaware of any other organisations currently using the older client, but please contact us if you still rely on it.)

The new architecture introduces many new keys and external configuration files. There is therefore a separate Guide To Configuring the NetarchiveSuite 7.0 Backend.

**Upgrading From Previous NetarchiveSuite Releases**

For those using either JMSArcRepositoryClient or LocalArcRepositoryClient there should be no special requirements to upgrade.

**Issues Resolved in Release 7.0**