

# Upgrading From 1.5.x to 1.6.x

In the notes below `[dspace]` refers to the install directory for your existing DSpace installation, and `[dspace-source]` to the source directory for DSpace 1.6. Whenever you see these path references, be sure to replace them with the actual path names on your local system.

## Upgrade Steps

1. **Backup Your DSpace.** First, and foremost, make a complete backup of your system, including:
  - A snapshot of the database. To have a "snapshot" of the PostgreSQL database, you need to shut it down during the backup. You should also have your regular PostgreSQL Backup output (using `pg_dump` commands).
  - The asset store (`[dspace]/assetstore` by default)
  - Your configuration files and customizations to DSpace (including any customized scripts).
2. **Download DSpace 1.6.x** Retrieve the new DSpace 1.6.x source code either as a download from [DSpace.org](http://DSpace.org) or check it out directly from the [SVN code repository](#). If you downloaded DSpace do not unpack it on top of your existing installation. Refer to [Installation Instructions, Step 3](#) for unpacking directives.
3. **Stop Tomcat.** Take down your servlet container. For Tomcat, use the `$/CATALINA/shutdown.sh` script. (Many installations will have a startup/shutdown script in the `/etc/init.d` or `/etc/rc.d` directories.
4. **Apply any customizations.** If you have made any local customizations to your DSpace installation they will need to be migrated over to the new DSpace. These are housed in one of the following places:
  - JSPUI modifications: `[dspace-source]/dspace/modules/jspui/src/main/webapp/`
  - XMLUI modifications: `[dspace-source]/dspace/modules/xmlui/src/main/webapp/`
5. **Update Configuration Files.** Some of the parameters have change and some are new. Changes will be noted below:
  - **\*\*CHANGE\*\*** The base url and oai urls property keys are set differently

```
# DSpace host name - should match base URL. Do not include port
number
dspace.hostname = localhost

# DSpace base host URL. Include port number etc.
dspace.baseUrl = http://localhost:8080

# DSpace base URL. Include port number etc., but NOT trailing
slash
# Change to xmlui if you wish to use the xmlui as the default, or
remove
# "/jspui" and set webapp of your choice as the "ROOT" webapp in
# the servlet engine.
dspace.url = ${dspace.baseUrl}/xmlui

# The base URL of the OAI webapp (do not include /request).
dspace.oai.url = ${dspace.baseUrl}/oai
```

- **\*\*NEW\*\*** New email options (Add these at the end of the "Email Settings" sub-section):

```
# A comma separated list of hostnames that are allowed to refer
browsers to
# email forms. Default behavior is to accept referrals only from
# dspace.hostname
#mail.allowed.referrers = localhost

# Pass extra settings to the Java mail library. Comma separated,
equals sign
# between the key and the value.
#mail.extraproperties = mail.smtp.socketFactory.port=465, \
#
mail.smtp.socketFactory.class=javax.net.ssl.SSLSocketFactory, \
#
mail.smtp.socketFactory.fallback=false

# An option is added to disable the mailserver. By default, this
property is
# set to false. By setting mail.server.disabled = true, DSpace
will not send
# out emails. It will instead log the subject of the email which
should have
# been sent. This is especially useful for development and test
environments
# where production data is used when testing functionality.
#mail.server.disabled = false
```

- **\*\*NEW\*\***New Authorization levels and parameters. See the [Configuration](#) documentation, "Delegation Administration" section for further information.

```

##### Authorization system configuration - Delegate ADMIN #####

# COMMUNITY ADMIN configuration
# subcommunities and collections
#core.authorization.community-admin.create-subelement = true
#core.authorization.community-admin.delete-subelement = true
# his community
#core.authorization.community-admin.policies = true
#core.authorization.community-admin.admin-group = true
# collections in his community
#core.authorization.community-admin.collection.policies = true
#core.authorization.community-admin.collection.template-item =
true
#core.authorization.community-admin.collection.submitters = true
#core.authorization.community-admin.collection.workflows = true
#core.authorization.community-admin.collection.admin-group = true
# item owned by collections in his community
#core.authorization.community-admin.item.delete = true
#core.authorization.community-admin.item.withdraw = true
#core.authorization.community-admin.item.reinstatiate = true
#core.authorization.community-admin.item.policies = true
# also bundle...
#core.authorization.community-admin.item.create-bitstream = true
#core.authorization.community-admin.item.delete-bitstream = true
#core.authorization.community-admin.item-admin.cc-license = true

# COLLECTION ADMIN
#core.authorization.collection-admin.policies = true
#core.authorization.collection-admin.template-item = true
#core.authorization.collection-admin.submitters = true
#core.authorization.collection-admin.workflows = true
#core.authorization.collection-admin.admin-group = true
# item owned by his collection
#core.authorization.collection-admin.item.delete = true
#core.authorization.collection-admin.item.withdraw = true
#core.authorization.collection-admin.item.reinstatiate = true
#core.authorization.collection-admin.item.policies = true
# also bundle...
#core.authorization.collection-admin.item.create-bitstream = true
#core.authorization.collection-admin.item.delete-bitstream = true
#core.authorization.collection-admin.item-admin.cc-license = true

# ITEM ADMIN
#core.authorization.item-admin.policies = true
# also bundle...
#core.authorization.item-admin.create-bitstream = true
#core.authorization.item-admin.delete-bitstream = true
#core.authorization.item-admin.cc-license = true

```

- **\*\*CHANGE\*\*** METS ingestor has been revised. (Modify In "Crosswalk and Packager Plugin Settings")

```

# Option to make use of collection templates when using the METS
ingester (default is false)
mets.submission.useCollectionTemplate = false

# Crosswalk Plugins:
plugin.named.org.dspace.content.crosswalk.IngestionCrosswalk = \
  org.dspace.content.crosswalk.PREMISCrosswalk = PREMIS \
  org.dspace.content.crosswalk.OREIngestionCrosswalk = ore \
  org.dspace.content.crosswalk.NullIngestionCrosswalk = NIL \
  org.dspace.content.crosswalk.QDCCrosswalk = qdc \
  org.dspace.content.crosswalk.OAIDCIngestionCrosswalk = dc \
  org.dspace.content.crosswalk.DIMIngestionCrosswalk = dim

plugin.selfnamed.org.dspace.content.crosswalk.IngestionCrosswalk
= \
  org.dspace.content.crosswalk.XSLTIngestionCrosswalk

plugin.named.org.dspace.content.crosswalk.DisseminationCrosswalk
= \
  org.dspace.content.crosswalk.SimpleDCDisseminationCrosswalk =
DC \
  org.dspace.content.crosswalk.SimpleDCDisseminationCrosswalk =
dc \
  org.dspace.content.crosswalk.PREMISCrosswalk = PREMIS \
  org.dspace.content.crosswalk.METSDisseminationCrosswalk = METS
\
  org.dspace.content.crosswalk.METSDisseminationCrosswalk = mets
\
  org.dspace.content.crosswalk.OREDisseminationCrosswalk = ore \
  org.dspace.content.crosswalk.QDCCrosswalk = qdc \
  org.dspace.content.crosswalk.DIMDisseminationCrosswalk = dim

```

- **\*\*CHANGE\*\*** Event Settings have had the following revision with the addition of 'harvester' (modify in "*Event System Configuration*"):

```

#### Event System Configuration ####

# default synchronous dispatcher (same behavior as traditional
DSpace)
event.dispatcher.default.class = org.dspace.event.BasicDispatcher
event.dispatcher.default.consumers = search, browse, eperson,
harvester

```

also:

```
# consumer to clean up harvesting data
event.consumer.harvester.class =
org.dspace.harvest.HarvestConsumer
event.consumer.harvester.filters = Item+Delete
```

- **\*\*NEW\*\*** New option for the Embargo of Thesis and Dissertations.

```
#### Embargo Settings ####
# DC metadata field to hold the user-supplied embargo terms
embargo.field.terms = SCHEMA.ELEMENT.QUALIFIER

# DC metadata field to hold computed "lift date" of embargo
embargo.field.lift = SCHEMA.ELEMENT.QUALIFIER

# string in terms field to indicate indefinite embargo
embargo.terms.open = forever

# implementation of embargo setter plugin--replace with local
implementation if
# applicable
plugin.single.org.dspace.embargo.EmbargoSetter = \
    org.dspace.embargo.DefaultEmbargoSetter

# implementation of embargo lifter plugin--replace with local
implementation if
# applicable
plugin.single.org.dspace.embargo.EmbargoLifter = \
    org.dspace.embargo.DefaultEmbargoLifter
```

- **\*\*NEW\*\*** New option for using the Batch Editing capabilities. See [Batch Metadata Editing Configuration](#) and also [System Administration : Batch Metadata Editing](#)

```

### Bulk metadata editor settings ###
# The delimiter used to separate values within a single field
# (defaults to a double pipe ||)
# bulkedit.valueseparator = ||

# The delimiter used to separate fields (defaults to a comma for
# CSV)
# bulkedit.fieldseparator = ,

# A hard limit of the number of items allowed to be edited in one
# go in the UI
# (does not apply to the command line version)
# bulkedit.gui-item-limit = 20

# Metadata elements to exclude when exporting via the user
# interfaces, or when
# using the command line version and not using the -a (all)
# option.
# bulkedit.ignore-on-export = dc.date.accessioned,
#                               dc.date.available, \
#                               dc.date.updated,
#                               dc.description.provenance

```

- **\*\*NEW\*\*** Ability to hide metadata fields is now available. (Look for "JSPUI & XMLUI Configurations" Section)

```

##### Hide Item Metadata Fields #####
# Fields named here are hidden in the following places UNLESS the
# logged-in user is an Administrator:
# 1. XMLUI metadata XML view, and Item splash pages (long and
# short views).
# 2. JSPUI Item splash pages
# 3. OAI-PMH server, "oai_dc" format.
# (NOTE: Other formats are not affected.)
# To designate a field as hidden, add a property here in the
# form:
#   metadata.hide.SCHEMA.ELEMENT.QUALIFIER = true
#
# This default configuration hides the dc.description.provenance
# field,
# since that usually contains email addresses which ought to be
# kept
# private and is mainly of interest to administrators:
# metadata.hide.dc.description.provenance = true

```

- **\*\*NEW\*\*** Choice Control and Authority Control options are available (Look for "JSPUI & XMLUI Configurations" Section):

```
## example of authority-controlled browse category--see authority
control config
#webui.browse.index.5 =
lcAuthor:metadataAuthority:dc.contributor.author:authority
```

And also:

```
##### Authority Control Settings #####

#plugin.named.org.dspace.content.authority.ChoiceAuthority = \
# org.dspace.content.authority.SampleAuthority = Sample, \
# org.dspace.content.authority.LCNameAuthority = LCNameAuthority,
\
# org.dspace.content.authority.SHERPARoMEOPublisher =
SRPublisher, \
# org.dspace.content.authority.SHERPARoMEOJournalTitle =
SRJournalTitle

## This ChoiceAuthority plugin is automatically configured with
every
## value-pairs element in input-forms.xml, namely:
##   common_identifiers, common_types, common_iso_languages
#plugin.selfnamed.org.dspace.content.authority.ChoiceAuthority =
\
# org.dspace.content.authority.DCInputAuthority

## configure LC Names plugin
#lcname.url = http://alcme.oclc.org/srw/search/lcnaf

## configure SHERPA/RoMEO authority plugin
#sherpa.romeo.url = http://www.sherpa.ac.uk/romeo/api24.php

##
## This sets the default lowest confidence level at which a
metadata value is included
## in an authority-controlled browse (and search) index.  It is a
symbolic
## keyword, one of the following values (listed in descending
order):
##   accepted
##   uncertain
##   ambiguous
##   notfound
##   failed
##   rejected
##   novalue
##   unset
## See manual or org.dspace.content.authority.Choices source for
descriptions.
authority.minconfidence = ambiguous
```

```
## demo: use LC plugin for author
#choices.plugin.dc.contributor.author = LCNameAuthority
#choices.presentation.dc.contributor.author = lookup
#authority.controlled.dc.contributor.author = true
##
## This sets the lowest confidence level at which a metadata
value is included
## in an authority-controlled browse (and search) index. It is a
symbolic
## keyword from the same set as for the default
"authority.minconfidence"
#authority.minconfidence.dc.contributor.author = accepted

## Demo: publisher name lookup through SHERPA/RoMEO:
#choices.plugin.dc.publisher = SRPublisher
#choices.presentation.dc.publisher = suggest

## demo: journal title lookup, with ISSN as authority
#choices.plugin.dc.title.alternative = SRJournalTitle
#choices.presentation.dc.title.alternative = suggest
#authority.controlled.dc.title.alternative = true

## demo: use choice authority (without authority-control) to
restrict dc.type on EditItemMetadata page
# choices.plugin.dc.type = common_types
# choices.presentation.dc.type = select

## demo: same idea for dc.language.iso
# choices.plugin.dc.language.iso = common_iso_languages
# choices.presentation.dc.language.iso = select
```



```
# Change number of choices shown in the select in Choices lookup
popup
#xmlui.lookup.select.size = 12
```

- **\*\*REPLACE\*\*** RSS Feeds now support Atom 1.0. *Replace its previous configuration with the one below:*

```
#### Syndication Feed (RSS) Settings #####

# enable syndication feeds - links display on community and
collection home pages
# (This setting is not used by XMLUI, as you enable feeds in your
theme)
webui.feed.enable = false
# number of DSpace items per feed (the most recent submissions)
webui.feed.items = 4
# maximum number of feeds in memory cache
# value of 0 will disable caching
webui.feed.cache.size = 100
# number of hours to keep cached feeds before checking currency
# value of 0 will force a check with each request
webui.feed.cache.age = 48
# which syndication formats to offer
# use one or more (comma-separated) values from list:
# rss_0.90, rss_0.91, rss_0.92, rss_0.93, rss_0.94, rss_1.0,
rss_2.0
webui.feed.formats = rss_1.0,rss_2.0,atom_1.0
# URLs returned by the feed will point at the global handle
server (e.g. http://hdl.handle.net/123456789/1)
# Set to true to use local server URLs (i.e.
http://myserver.myorg/handle/123456789/1)
webui.feed.localresolve = false

# Customize each single-value field displayed in the
# feed information for each item. Each of
# the below fields takes a *single* metadata field
#
# The form is <schema prefix>.<element>[.<qualifier>|. *]
webui.feed.item.title = dc.title
webui.feed.item.date = dc.date.issued

# Customize the metadata fields to show in the feed for each
item's description.
# Elements will be displayed in the order that they are specified
here.
#
# The form is <schema prefix>.<element>[.<qualifier>|. *][(date)],
...
#
# Similar to the item display UI, the name of the field for
display
# in the feed will be drawn from the current UI dictionary,
```

```
# using the key:
# "metadata.<field>"
#
# e.g.   "metadata.dc.title"
#        "metadata.dc.contributor.author"
#        "metadata.dc.date.issued"
webui.feed.item.description = dc.title, dc.contributor.author, \
                             dc.contributor.editor, dc.description.abstract, \
                             dc.description
# name of field to use for authors (Atom only) - repeatable
webui.feed.item.author = dc.contributor.author

# Customize the extra namespaced DC elements added to the item
# (RSS) or entry
# (Atom) element.  These let you include individual metadata
# values in a
# structured format for easy extraction by the recipient, instead
# of (or in
# addition to) appending these values to the Description field.
## dc:creator value(s)
#webui.feed.item.dc.creator = dc.contributor.author
## dc:date value (may be contradicted by webui.feed.item.date)
#webui.feed.item.dc.date = dc.date.issued
## dc:description (e.g. for a distinct field that is ONLY the
#abstract)
#webui.feed.item.dc.description = dc.description.abstract

# Customize the image icon included with the site-wide feeds:
```

```
# Must be an absolute URL, e.g.
## webui.feed.logo.url =
${dspace.url}/themes/mysite/images/mysite-logo.png
```

- **\*\*NEW\*\*** Opensearch Feature is new to DSpace

```
#### OpenSearch Settings ####
# NB: for result data formatting, OpenSearch uses Syndication
Feed Settings
# so even if Syndication Feeds are not enabled, they must be
configured
# enable open search
websvc.opensearch.enable = false
# context for html request URLs - change only for non-standard
servlet mapping
websvc.opensearch.uicontext = simple-search
# context for RSS/Atom request URLs - change only for
non-standard servlet mapping
websvc.opensearch.svccontext = open-search/
# present autodiscovery link in every page head
websvc.opensearch.autolink = true
# number of hours to retain results before recalculating
websvc.opensearch.validity = 48
# short name used in browsers for search service
# should be 16 or fewer characters
websvc.opensearch.shortname = DSpace
# longer (up to 48 characters) name
websvc.opensearch.longname = ${dspace.name}
# brief service description
websvc.opensearch.description = ${dspace.name} DSpace repository
# location of favicon for service, if any must be 16X16 pixels
websvc.opensearch.faviconurl =
http://www.dspace.org/images/favicon.ico
# sample query - should return results
websvc.opensearch.samplequery = photosynthesis
# tags used to describe search service
websvc.opensearch.tags = IR DSpace
# result formats offered - use 1 or more comma-separated from:
html,atom,rss
# NB: html is required for autodiscovery in browsers to function,
# and must be the first in the list if present
websvc.opensearch.formats = html,atom,rss
```

- **\*\*NEW\*\*** \*Exposure of METS metadata can be now hidden. (See "OAI-PMH SPECIFIC CONFIGURATIONS" in the *dspace.cfg* file)

```
# When exposing METS/MODS via OAI-PMH all metadata that can be
mapped to MODS
# is exported. This includes description.provenance which can
contain personal
# email addresses and other information not intended for public
consumption. To
# hide this information set the following property to true
oai.mets.hide-provenance = true
```

- **\*\*NEW\*** \*SWORD has added the following to accept MIME/types. (See "SWORD Specific Configurations" Section)

```
# A comma separated list of MIME types that SWORD will accept
sword.accepts = application/zip
```

- **\*\*NEW\*** \*New OAI Harvesting Configuration settings are now available. (See "OAI Harvesting Configurations")

```
#-----#
#-----OAI HARVESTING CONFIGURATIONS-----#
#-----#
# These configs are only used by the OAI-ORE related functions #
#-----#

### Harvester settings

# Crosswalk settings; the {name} value must correspond to a
declared ingestion crosswalk
# harvester.oai.metadataformats.{name} = {namespace},{optional
display name}
harvester.oai.metadataformats.dc =
http://www.openarchives.org/OAI/2.0/oai_dc/, Simple Dublin Core
harvester.oai.metadataformats.qdc = http://purl.org/dc/terms/,
Qualified Dublin Core
harvester.oai.metadataformats.dim =
http://www.dspace.org/xmlns/dspace/dim, DSpace Intermediate
Metadata

# This field works in much the same way as
harvester.oai.metadataformats.PluginName
# The {name} must correspond to a declared ingestion crosswalk,
while the
# {namespace} must be supported by the target OAI-PMH provider
when harvesting content.
# harvester.oai.oreSerializationFormat.{name} = {namespace}

# Determines whether the harvester scheduling process should be
started
# automatically when the DSpace webapp is deployed.
# default: false
harvester.autoStart=false
```

```
# Amount of time subtracted from the from argument of the PMH
request to account
# for the time taken to negotiate a connection. Measured in
seconds. Default value is 120.
#harvester.timePadding = 120

# How frequently the harvest scheduler checks the remote provider
for updates,
# measured in minutes. The default value is 12 hours (or 720
minutes)
#harvester.harvestFrequency = 720

# The heartbeat is the frequency at which the harvest scheduler
queries the local
# database to determine if any collections are due for a harvest
cycle (based on
# the harvestFrequency) value. The scheduler is optimized to then
sleep until the
# next collection is actually ready to be harvested. The
minHeartbeat and
# maxHeartbeat are the lower and upper bounds on this timeframe.
Measured in seconds.
# Default minHeartbeat is 30. Default maxHeartbeat is 3600.
#harvester.minHeartbeat = 30
#harvester.maxHeartbeat = 3600

# How many harvest process threads the scheduler can spool up at
once. Default value is 3.
#harvester.maxThreads = 3

# How much time passes before a harvest thread is terminated. The
termination process
# waits for the current item to complete ingest and saves
progress made up to that point.
# Measured in hours. Default value is 24.
#harvester.threadTimeout = 24

# When harvesting an item that contains an unknown schema or
field within a schema what
# should the harvester do? Either add a new registry item for the
field or schema, ignore
# the specific field or schema (importing everything else about
the item), or fail with
# an error. The default value if undefined is: fail.
# Possible values: 'fail', 'add', or 'ignore'
harvester.unknownField = add
harvester.unknownSchema = fail

# The webapp responsible for minting the URIs for ORE Resource
Maps.
# If using oai, the dspace.oai.uri config value must be set.
# The URIs generated for ORE ReMs follow the following convention
```

```
for both cases.
# format: [baseURI]/metadata/handle/[theHandle]/ore.xml
# Default value is oai
#ore.authoritative.source = oai

# A harvest process will attempt to scan the metadata of the
incoming items
# (dc.identifier.uri field, to be exact) to see if it looks like
a handle.
# If so, it matches the pattern against the values of this
parameter.
# If there is a match the new item is assigned the handle from
the metadata value
# instead of minting a new one. Default value: hdl.handle.net
#harvester.acceptedHandleServer = hdl.handle.net, handle.myu.edu

# Pattern to reject as an invalid handle prefix (known test
string, for example)
# when attempting to find the handle of harvested items. If there
is a match with
```

```
# this config parameter, a new handle will be minted instead.
Default value: 123456789.
#harvester.rejectedHandlePrefix = 123456789, myTestHandle
```

- **\*\*NEW\*\* SOLR Statistics Configurations.** For a little more detailed information regarding the configuration, please refer to [DSpace SOLR Statistics Configuration](#) ; or, for installation procedures, refer to [Advanced Installation: DSpace Statistics](#).

```
#-----#
#-----SOLR STATISTICS CONFIGURATIONS-----#
#-----#
# These configs are only used by the SOLR interface/webapp to #
# track usage statistics. #
#-----#

##### Usage Logging #####
solr.log.server = ${dspace.baseUrl}/solr/statistics
solr.spidersfile = ${dspace.dir}/config/spiders.txt
solr.dbfile = ${dspace.dir}/config/GeoLiteCity.dat
useProxies = true

statistics.item.authorization.admin=true
```

6. **Build DSpace.** Run the following commands to compile DSpace.:

```
cd /[dspace-source]/dspace/
mvn -U clean package
```

You will find the result in `[dspace-source]/dspace/target/dspace-[version]-build.dir`. Inside this directory is the compiled binary distribution of DSpace. Before rebuilding DSpace, the above command will clean out any previously compiled code ('clean') and ensure that your local DSpace JAR files are updated from the remote maven repository.

7. **Update the database.** The database schema needs to be updated to accommodate changes to the database. SQL files contain the relevant updates are provided. Please note that if you have made any local customizations to the database schema, you should consult these updates and make sure they will work for you.

- For PostgreSQL: `psql -U [dspace-user] -f [dspace-source]/dspace/etc/postgres/database_schema_15-16.sql [database name]` (Your database name is by default 'dspace'). Example: `psql -U dspace -f /dspace-1.6-1-src-release/dspace/etc/postgres/database_schema_15-16.sql dspace`
- For Oracle: Execute the upgrade script, e.g. with `sqlplus`, recording the output:
  - a. Start SQL\*Plus with `sqlplus [connect args]`
  - b. Record the output: `SQL> spool 'upgrade.lst'`
  - c. Run the upgrade script `SQL> @[dspace-source]/dspace/etc/oracle/database_schema_15-16.sql`
  - d. Turn off recording of output: `SQL> spool off`
  - e. Please note: The final few statements WILL FAIL. That is because you have run some queries and use the results to construct the statements to remove the constraints, manually; Oracle doesn't have any easy way to automate this (unless you know PL/SQL). So, look for the comment line beginning:

```
--You need to remove the already in place constraints
```

and follow the instructions in the actual SQL file. Refer to the contents of the spool file "upgrade.lst" for the output of the queries you'll need.

8. **Update DSpace.** Update the DSpace installed directory with the new code and libraries. Issue the following commands:

```
cd [dspace-source]/dspace/target/dspace-[version]-build.dir
ant -Dconfig=[dspace]/config/dspace.cfg update
```

9. **Update Registry for the CC License.** If you use the CC License, an incorrect mime-type type is being assigned. You will need to run the following step: `[dspace]/bin/dspace registry-loader -bitstream [dspace]/etc/upgrades/15-16/new-bitstream-formats.xml`
10. **Generate Browse and Search Indexes.** It makes good policy to rebuild your search and browse indexes when upgrading to a new release. Almost every release has database changes and indexes can be affected by this. In the DSpace 1.6 release there is Authority Control features and those will need the indexes to be regenerated. To do this, run the following command from your DSpace install directory (as the dspace user): `[dspace]/bin/dspace index-init`
11. **Deploy Web Applications.** Copy the web applications files from your `[dspace]/webapps` directory to the subdirectory of your servlet container (e.g. tomcat): `cp -R [dspace]/webapps/* [tomcat]/webapps/`
12. **Restart servlet.** Now restart your Tomcat/Jetty/Resin server program and test out the upgrade.
13. **Rolling Log Appender Upgrade.** You will want to upgrade your logs to the new format to use the SOLR Statistics now included with DSpace. While the commands for this are found in Chapter 8, here are the steps needed to be performed.

```
[dspace]/bin/dspace stats-log-converter -i input file name -o output
file name -m (if you have more than one dspace.log file)
[dspace]/bin/dspace stats-log-importer -i input file name (probably
the output name from above) -m
```

The user is highly recommended to see the [System Administration : DSpace Log Converter](#) documentation.