



netarchive.dk

# Settings in NetarchiveSuite

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Design Discussion

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# Outline

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- Current situation
- Examples of undesirable properties
  - Settings describe all components
  - Plugins not properly handled
  - Groupings of settings not properly handled
  - Settings not reloadable
  - Do we want default settings?
- What to do?

## Current situation

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- ❑ Settings are all stored in settings.xml
- ❑ All settings are known in Settings.java
- ❑ Settings are referred to as key/value pairs

## Undesirable properties - components

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- ❑ Settings specific to one component are described in all settings files
- ❑ Settings specific to one component is known in `dk.netarkivet.common`

## Undesirable properties - plugins

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- ❑ When we write a new plugin we update `dk.netarkivet.common.Settings` with a constant
- ❑ We update the `settings.xsd` file
- ❑ Although this is not required, it makes third-party plugins “second-level citizens”
- ❑ It is difficult to have settings for plugins

## Undesirable properties - grouping

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- ❑ We cannot group settings in any proper way when using key/value pairs
- ❑ Most places we simply use the order of the settings to identify grouping (e.g. sitesections)
- ❑ In monitor settings we group by making different tags (host1, host2, host3, ...) making poor XML

## Undesirable properties - reloadable

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- ❑ We currently can reload our settings
- ❑ However, it is unlikely that it will work many places
- ❑ Changing settings with JMX would be very desirable

## Undesirable properties – default settings

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- ❑ The current architecture does not provide a good way to have default settings
- ❑ Would it be a good idea?



## What to do?

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- ❑ I do not have the answer
- ❑ We could extend the current system or reimplement entirely
- ❑ Heritrix has a working implementation of pluggable settings
- ❑ The xstream framework has a nice object-to-XML framework
- ❑ Needs more work