# Den bibliometriske forskningsindikator

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# Getting started / Steps to migrate to new BFI module

The BFI module was introduced in Pure 5.2.0 and is enabled for all Danish customers, but to be able to use the functionality certain settings must be provided. Further, a number of jobs must be configured and executed.

#### **Preconditions**

A client certificate must be bought and configured in the BFI system. Further, we recommend that a system user is created and used as the API Username

We do not know the exact process for acquiring the certificate or a system user, but refer to BFI-sekretariatet for this information.

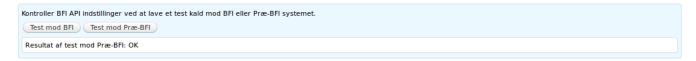
#### **BFI Settings**

Navigate to the BFI configuration page in Pure in the Administrator workspace.

Name	Description
API URL	The API URL is by-default configured for the BFI production system and should normally not be changed.  Note! If the API URL is changed after the initial Run Once (Migration) Jobs has been executed it will have side effects, such as journals, publishers and conference series no longer appearing to be from the central database!
	(The URL for the test system is: https://pre-bfi-api.fi.dk/api/)
API Username	The email address of a user in the BFI system. Normally this would be a system account that is not associated with a person.
API Certificate	A PKCS#12 certificate file containing the client certificate that is registered in the BFI system. The client certificate gives Pure access to data relevant for the university associated with the certificate. For further details about certificate requirements we refer to BFI-sekretariatet.
API Certificate Password	The password to unlock the PKCS#12 certificate file.
Show BFI check on the BFI tab	By disabling this the BFI check field will not be visible on the BFI tab.
Show BFI points tab to personal users	By enabling this setting the BFI information tab in the publication editor will be visible to person users. The default is to hide the tab for personal uses.
Limit search to BFI authority files	By enabling this setting users will only search for journals, book series, conference series and publishers that are listed on the present authority lists. Journal and publisher duplicate jobs will still search for duplicates in the whole of the so-called central databases. By enabling the performance for searching journals will generally improve, since the BFI-system generally responds quicker and with fewer results. The setting is by default enabled.

After configuring the API settings you can verify the settings by making a test call to either the pre-BFI or production BFI system.

An example of a test call with correct settings:



An example of a test call with incorrect settings:



## **Run Once (Migration) Jobs**

Once the BFI Settings are completed the migration jobs below should be executed. The jobs may take many hours or even days to complete so it is recommended to let them run during the weekend or at least in a period where Pure won't be restarted.

The jobs must be executed one by one and must not be run simultaneously.

Name	Description	
Delete unused content imported from the BFI central database	Deletes all journals, conference series and publishers imported from the BFI central database that are not used by other content.	
Migrate BFI source IDs	Migrates BFI source ID information from BFI number to new GUID format.	
Cleanup BFI level journal metrics PURE 5.3/4.22	Removes invalid rating values (0, -1) from BFI level journal metrics.	
Amend missing BFI source IDs PURE 5.3/4.22	Amend missing BFI source ID information where BFI number is present, but source information is otherwise missing.  This re-runs the <i>Migrate BFI source IDs</i> job for specific content. The problem is reported in   DDUPURE-7147 - Getting issue details  STATUS	

#### BFI synchronisation jobs

Finally once the migration jobs are completed you must setup the following synchronisation jobs to keep the BFI information in Pure up-to-date with the BFI system.

Name	Interval	Description
BFI Publication Status Update Job	Daily around 06:30  Starting with Pure 5.3/4.22 it is recommended to run the job each hour  PURE 5.3/4.22	This job synchronises the information about BFI points, screening errors, etc.  The initial run will probably take a couple of hours. However the job keeps track of the last run time and will retrieve changed information since that time and thus subsequent runs are quite fast.  06:30 is recommended because the BFI-system is harvesting and calculating each university between 23:00 and 06:00. Hence by synchronise after the BFI-harvest you will have updated BFI-information on publications the day after changing data in Pure.
BFI Journal Synchronisation	Weekly	Updates all journals and book series from the central database with the latest information, such as BFI level, titles, ISSNs, etc.
BFI Publisher Synchronisation	Weekly	Updates all publishers from the central database with the latest information, such as BFI level, titles, ISBN roots, etc.
BFI Conference Series Synchronisation	Weekly	Updates all conference series from the central database with the latest information, such as BFI level, titles, etc.

BFI Journal Duplicates Job PURE 5.3/4.22	Bi-weekly or monthly	Searches BFI for all local journals in Pure and finds title and ISSN duplicates.  This job usually runs for many hours, possibly even days, so it is recommended to only run it ahead of your manual duplicates checking process when necessary.
BFI Publisher Duplicates Job PURE 5.3/4.22	Bi-weekly or monthly	Searches BFI for all local publishers in Pure and finds title and ISBN duplicates.  This job usually runs for many hours, possibly even days, so it is recommended to only run it ahead of your manual duplicates checking process when necessary.

With the synchronisation jobs configured and executed at least once, the BFI module setup is completed and ready for use.

To run the BFI Publication Update Job every hour you can use the daily interval with time as: \*:00

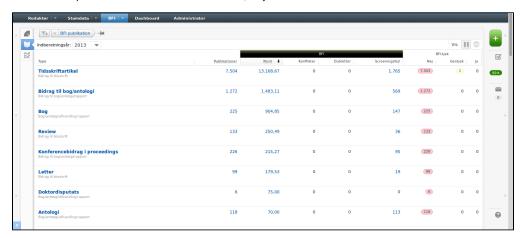


# BFI Workspace

The BFI workspace gives an overview of the BFI information. You have BFI specific filters available in additional to the regular filters. The overview is based around a submission year.

All numbers are clickable and takes you to a listing with the publications the numbers represents.

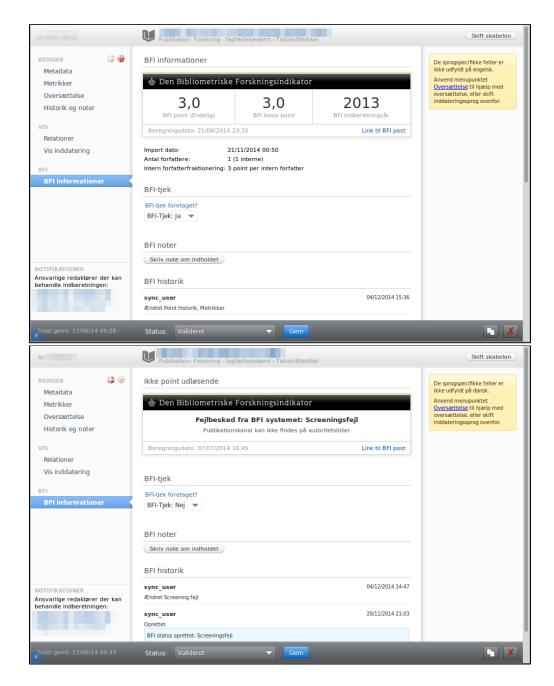
The BFI workspace is visible to users with a BFI role, only.



### BFI Information tab

The tab contains BFI information for a specific publication. On the tab you have a quick view on the points given or in case of an screening error the error details.

The BFI information tab is visible to all users with a BFI role - and depending on the configuration also visible to personal users.



# A note about BFI publications

A publication in Pure has one of these three BFI related states and is determined by changes made both in Pure and by BFI. You can use the BFI Publication filter publication to a specific state.

State	Description
BFI publication	A publication in this state has been harvested and the result is up to date in Pure.  If the publication has been altered in Pure and not been updated yet, a warning message is displayed. If no update is received within 24 hours the publication will move to the <i>Previous BFI publication</i> state below.
	Additionally if the publication has been modified after the final harvest date for it's submission year, the publication is still considered up to date because BFI no longer harvests the publication.  See Final harvest date configuration for information.
	See BFI synchronisation jobs for information on update times.

Previous BFI publication	A publication in this state has been modified in Pure and the BFI system has been queried for updated information but none was available.  The publication is excluded from the BFI overview screens.  A warning message is displayed on the BFI information tab and only BFI history, comments and BFI check is available. This is to avoid confusion with incorrect BFI information.  As soon as an update is received from the BFI system the publication will move back to the BFI publication state above.  See below for an example on how a publication may end up in this state.
Non-BFI publication	A publication in this state has not been harvested by BFI and thus no BFI information is available.

#### **Previous BFI publication example**

Consider a scenario where the BFI OAI Endpoint Configuration is configured with Allowed workflow steps to include Approved and Validated.

As part of the regular editorial work in Pure a publication may changes workflow step many times between *For approval* and *Approved*. Each time it enters the *For approval* step it will not be harvested by BFI because of the BFI OAI Endpoint Configuration.

Since no BFI information is displayed from the BFI-system, the publication is updated with a 'No BFI status for this publication' message is shown. The BFI history, comments and BFI check is still available.

Once the publication enters the Approved step again it will be harvested by BFI as usual and go back to the BFI publication state.

#### Final harvest date configuration

PURE 5.3/4.22

Starting with Pure 5.3/4.22 final harvest dates must be configured. Default configuration is provided as seen in the screenshot below.

Final harvest dates should contain the date of the final BFI harvest. The date doesn't have to be the exact dates, but should be pretty close. The default values provided should be okay for all at least including submission year 2014.

The dates are used by Pure to determine whether the BFI information associated with a publication is up to date. If the publication is modified after the final harvest date for it's submission year it is always considered up to date because BFI no longer harvests it.

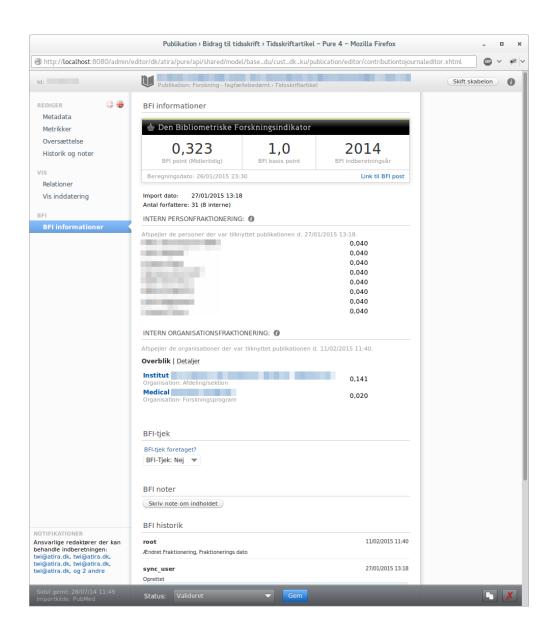
The reason these dates are necessary is to avoid erroneously changing the state to *Previous BFI publication* for all publications that are modified after their respective final harvest date.

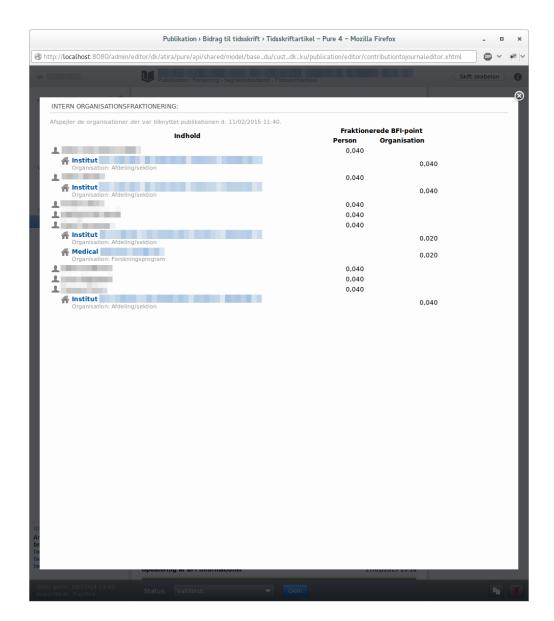


## Fractionation

PURE 5.3/4.22

Starting with Pure 5.3/4.22 internal person and organisation fractionation is available on the BFI informations tab in the publication editor.





# **BFI Roles**

A number of BFI specific roles are available. To see any BFI information such as BFI-points, screening errors, etc. you must have one of the BFI roles. The only exception is that personal users may view the BFI information via the BFI information tab in the publication editor if the settings are configured to allow this

BFI level metrics on journals, publishers, and conference series are visible as usual and are not covered by the BFI roles.

Role	Description
BFI Administr ator	Has access to the BFI workspace and BFI reporting as well as all BFI information across the Pure instance.
	<b>Note!</b> This role does not have permission to modify publications, so normally a user with the BFI administrator role would also have the Publication administrator role to be able to modify BFI workflow.
BFI Editor	Has access to the BFI workspace and BFI reporting as well as BFI information associated via one or more organisations.
	<b>Note!</b> This role does not have permission to modify publications, so normally a user with the BFI editor role would also have the Publication editor role with the same set of organisations to be able to modify BFI workflow.
BFI	Has access to the BFI workspace and BFI reporting as well as all BFI information associated via one or more organisations.
Reporter	<b>Note!</b> This role does not have permission to modify BFI information such as BFI workflow. To view publications the <i>My content</i> filter must be removed in the content listing.

#### BFI Editorial tasks

Users with BFI-roles can have two dynamic editorial tasks.

- · Pending BFI check are publications in the ongoing BFI-year which have the BFI check performed status 'No' and 'Recheck'
- · Pending BFI recheck are publications in the ongoing BFI-year which have the BFI check performed status 'Recheck'.

Ongoing BFI-year in Pure is last year until we have received final BFI-point for that year. After that it will be current year. For instance in 2015 the ongoing BFI-year is 2014 until Pure receives final BFI-points for 2014 publications. After that the ongoing BFI-year changes to 2015.



An example is shown in this screenshot:

# **BFI OAI Endpoint**

A separate OAI endpoint is available for harvesting by the BFI system. This is necessary to provide fine-grained control over which publications are available for harvesting, as well as request logging.

If the BFI OAI Endpoint is to be used for harvesting you will need to contact the BFI-secretary with the new OAI Endpoint URL.

The URL for the endpoint is similar to the existing publicly available OAI Endpoint, which is usually located at http://example.com/ws/oai - the BFI OAI Endpoint is located at http://example.com/ws/bfi-oai

## Configuration

Under web services on the Administrator workspace in Pure you will find the BFI OAI configuration. The menu is only available when web services are deployed as part of the Pure instance.

Name	Description
Allowed workflow steps	Limits publications based on the current workflow step (see example above)
Allowed publication states	Limits publications based on the publication status
Allowed visibility on publications	Limits publications based on the visibility
Allow external publications	Determine whether external publications are included or not
Allowed IP ranges	Determines which IP ranges are allowed to access the BFI-specific OAI interface.  If no ranges and specified the OAI interface is not accessible.
	A default IP range is provided for the BFI harvesting system. The IP address as of December 2014 is 188.64.154.254.
Request logging	Determines what type of request logging is enabled for the BFI-specific OAI interface. It is a separate logging from everything else in Pure.  • Disabled No request logging is performed • Request only A single log entry is created for each request with the timestamp, remote IP address and requested URL. • Request and response Same as Request only, and in addition the full response body is logged as well.
Request logging folder	Please note this is upwards of half a megabyte of data per request.  The full path to the folder where request log files should be written. The path must be accessible and writeable by the user the is running Pure.

#### Security

Pure will automatically try to configure the BFI OAI security, but in some cases it can be necessary to manually perform this configuration, e.g. when the Pure webservices are not available but is enabled at a later point in time.

Please note! If these settings are incorrect some of the Configuration options above will not have any effect.

To change these settings Pure's webservices must be deployed.

Navigate to the Administrator workspace in Pure then navigate to the Security tab, click the "I understand" button and navigate to Ws. Find the BFI oai block and verify the settings matching the screenshot below. Generally, all items that can be disabled should be disabled because the limitation is handled by the Configuration options above.



### **BFI** Reporting

Reporting on BFI information is no longer separate report templates but instead part of the regular publication report templates.

**Note!** Any existing BFI specific report definitions are no longer available and cannot be run. The functionality has been removed and replaced by metrics as seen below.

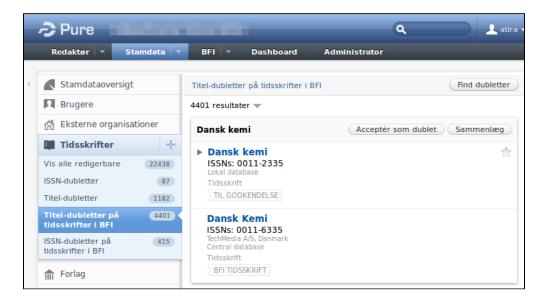
Only BFI roles are able to report on BFI information such as BFI-points.



# Journal and publisher duplicates in BFI PURE 5.3/4.22

Starting with Pure 5.3/4.22 two new jobs has been added that searches BFI for duplicates against the local journals and publishers in Pure.

The duplicates can be managed and merged by the usual roles and they are available via new menu items beneath journals and publishers. External duplicates are labeleld as either "BFI Journal" or "BFI Publisher" and has limited, but relevant, information available. Merging of external duplicates is done the same way as you merge existing duplicates in Pure.



# Import of legacy BFI points 2008 - 2013

Starting with Pure 5.3/4.22 a number of new jobs has been added to allow importing of legacy BFI points and related information. Furthermore this allows calculation of fractionation.

As seen below a job exists for each BFI year, so it is possible to import data for the years you want.

It is recommended to run one job at a time. Each job normally runs for about 5-10 minutes to complete, except the 2013 job which runs for considerably longer.

Job	Туре	Comment	Availability
BFI points from 2008	Run once job		PURE 5.3/4.22
BFI points from 2009	Run once job		PURE 5.3/4.22
BFI points from 2010	Run once job		PURE 5.3/4.22
BFI points from 2011	Run once job		PURE 5.3/4.22
BFI points from 2012	Run once job		PURE 5.3/4.22
BFI points from 2013 import job	Cron job	The job for 2013 is a cron job to be able to reuse the existing functionality for updating BFI points going forward.  The cron job should be created with <i>Interval</i> set to manual to avoid multiple executions of the job.	PURE 5.2.2/4.21.2
BFI legacy points import job	Cron job	Legacy import of historical BFI points from the configured year. The job is used to import data from 2013 and onwards (earlier data is not available in the BFI system).  Please note running this job will recalculate fractionation on affected publications.  Normally this job should not be run or at most one time per year.	PURE 5.5.3/4.24.3

# API error messages and common solutions

When you perform a test to verify the certificate against either the Pre-BFI or production BFI systems you may get a number of different error messages. Below is the solutions to common problems.

#### BFI module configuration is missing!

This message means you need to provide all configuration fields described in BFI Settings above.

#### BFI service responded with status code: HTTP/1.1 403 Forbidden

This message usually indicates that the certificate is correct, but the API username is incorrect.

The email address specified as API username must be registered in the BFI system.

#### failed to decrypt safe contents entry: javax.crypto.BadPaddingException: Given final block not properly padded

This message means that the certificate cannot be opened. Normally this is because the password entered is incorrect.

#### BFIWebApiClientException: Caught exception while invoking BFI service

This is a general error message and to find the root cause you must look for a line starting with Caused by.

#### Caused by: javax.net.ssl.SSLPeerUnverifiedException: peer not authenticated

This message means that Pure can't verify the secure connection to the BFI API.

A common cause for this is when your Pure installation is using a custom Java trust store. Another uncommon cause is when the server certificate in the BFI system is expired - only BFI can resolve that problem.

The solution is to import the Comodo RSA CA certificate into your custom Java trust store:



In January 2016 the BFI system changed to use a certificate from Comodo RSA CA

If the comodorsaca doesn't exist in Java's cacerts file you have to upgrade your Java 8 installation to a later version.

(Prior to 2016 the BFI system used a certificate from Global Sign CA.)

- # Export the Comodo RSA CA certificate from Java's built-in trust store
- \$ /pack/jdk8/jre/bin/keytool -exportcert -alias comodorsaca -file comodorsaca.crt -keystore /pack/jdk8/jre/lib
  /security/cacerts
- # The default password for Java's built-in trust store is: changeit
- # Now import the Comodo RSA CA certificate into your custom trust store
- \$ /pack/jdk8/jre/bin/keytool -import -trustcacerts -file comodorsaca.crt -alias globalsignca -keystore /pack /scripts/custom-trustStore.jks
- # You may have to restart Pure before the change is applied

### General problems and common solutions

#### All publications from 2014 has a screening error after you have executed the run once jobs

This happens when the BFI harvest is done in the period between the BFI module has been installed and the Run Once (Migration) Jobs has been executed.

Since the jobs take a while to run this is a common problem.

The solutions is to ask FI to re-harvest all publications from the beginning or at least from a date earlier enough to include all publications. This ensure the information harvested by FI is correct.

Legacy import of historical BFI points from the configured year. The job is used to import data from 2013 and onwards (earlier data is not available in the BFI system). Please note running this job will recalculate fractionation on affected publications. Normally this job should not be run or at most one time per year.