



An Australian Government Initiative

**business.gov.au**

Your business gateway to government information and services

# business.gov.au

# Content Syndication

## Java Installation Guide

Version 1.01



**Department of Innovation, Industry, Science and Research**

Support email: [syndication@business.gov.au](mailto:syndication@business.gov.au)

Web: <http://www.syndication.business.gov.au>

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# Welcome to business.gov.au

business.gov.au offers you simple and convenient access to all the government information, transactions and services you need. It's a whole-of-government service providing essential information on planning, starting and running your business.

## Syndication

Syndication allows you to access and publish business.gov.au content directly to your website or view this content using an RSS Reader. This enables your clients to access up-to-date government information directly from your website, rather than having to go to business.gov.au or to the relevant government site.

Syndicated content is available as either a true **RSS Feed** for use with RSS news readers or by downloading and installing the **Full Service** to integrate business.gov.au content into your own website.

### RSS Service

One new feature of the redevelopment is a Really Simple Syndication (RSS) service. This fully compliant RSS service allows small organisations or individuals to sign-up automatically and gain access to the business.gov.au RSS feed without submitting a Memorandum of Understanding (MoU).

This feed can be easily viewed using RSS Newsreaders (available to download for free from the internet) or be published on websites. Many website content management systems now include the ability to incorporate RSS feeds as a standard feature.

### Full Service

A more sophisticated feed has been implemented in the redevelopment. This Full Service includes a greater amount of content for publication on partner websites, including the new Business News Channel and Local Search facility.

A set of user-friendly tools will help non-technical staff to implement this service. Partners with technical staff will also be able to further modify the feed to present a more sophisticated integration of business.gov.au information and services within their own corporate content.

### Legacy Service

The current Legacy Service will still be available for existing syndication partners. However, we do encourage you to consider implementing the new Full Service when possible.

Please read the following section for more information about the benefits of upgrading from the Legacy Service to the Full Service.

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## Information for Existing Syndication Partners

If you are an existing Syndication Partner and receiving syndicated content automatically we encourage you to upgrade your existing syndication installation to the new syndication toolbox.

Note that your existing process will continue to be supported and content will continue to be refreshed on a daily basis, however you will notice a change in the structure of the content you are currently receiving.

You should have been contacted by phone or email by business.gov.au staff with more detailed instructions on how to obtain a username, which is the email address of your primary contact, and password which will be automatically generated.

To make the upgrade process easier, you are able to install the upgraded service and run it alongside your current syndication service. Doing so will enable you to make the necessary changes to the style sheets and site structure, if required, to ensure the new content will integrate into your website without affecting your existing look and feel.

If you have any concerns please contact business.gov.au – [syndication@business.gov.au](mailto:syndication@business.gov.au) - to discuss any concerns you may have regarding the installation of the upgraded syndication package or for general assistance.

## New Syndication Partners

In order to download and install the Syndication Toolbox, you are required to have registered for the Syndication RSS Feeds and enter in to a MOU (Memorandum of Understanding) with the Department of Innovation, Industry, Science and Research.

A copy of the MOU can be downloaded from <http://www.syndication.business.gov.au> after you have registered for the Syndication RSS Feeds. Select the **Click here to subscribe to the full syndication package** link located at the bottom right hand side of the screen to access the MOU.

Please download, print, sign and either fax the completed MOU to (02) 6276 1703 or send to:

Syndication Manager  
business.gov.au  
GPO Box 9839  
Canberra ACT 2601

Once we have received and approved the MOU, a User ID will be generated and forwarded to you

Please contact [syndication@business.gov.au](mailto:syndication@business.gov.au) if you have any queries regarding the MOU process.

## Installing the Syndication Service

Before you install the Syndication Service you will need to determine which installation package is most suitable to your operating system and web server. [business.gov.au](http://business.gov.au) currently provides 3 different installation packages – Windows, Java and PHP – to cater for a variety of operating systems and web servers.

### **Note**

Please consult with your system administrator or webmaster before installing the syndication package on your system.

## Java Installer

### System Requirements

Before installing the syndication service, please ensure that your system meets the following prerequisites.

**Java JRE 1.4 or later**

**Java API for XML processing (JAXP) 1.3 compliant library**

OR

**Java 1.5 or later (1.5 provides JAXP 1.3)**

You can download Java at <http://java.sun.com/downloads/>

Apache's Xalan for Java is a free JAXP library and is available at <http://xml.apache.org/xalan-j/>

### Installation Requirements

You will need the following tools to install the syndication service.

#### **Gunzip**

GNU gunzip to uncompress the installation

#### **Tar**

tar (such as GNU tar) to unpack the installation

### Install the Software

- 1 Uncompress the installation:

---

```
$ gunzip business.gov.au\ Syndication-VERSION-java.tgz
```

## 2 Unpack the installation:

```
$ tar xvf business.gov.au\ Syndication-VERSION-java.tar
```

Note that for GNU Linux, the previous two commands can be called together:

```
$ tar xzvf business.gov.au\ Syndication-VERSION-java.tgz
```

## 3 Run the installation script:

```
$ cd business.gov.au\ Syndication-VERSION-java
$ ./install.sh
This script will install the business.gov.au Syndication Java
tools on your system

Checking for required components:
Looking for awk (used for install) ... [ Found ]
Looking for sed (used for install) ... [ Found ]
Looking for JRE ... [ Found ]
Verifying JRE version ... [ OK ]
Looking for an appropriate JAXP 1.3 library ... [ Found ]
```

If the installer is unable to locate an appropriate JAXP library the following message will be displayed. Follow the instructions provided and then run the installation script again.

```
Looking for an appropriate JAXP 1.3 library ...

Could not find an appropriate Java API for XML processing
(JAXP) library.

Try using a JAXP 1.3 library such as Apache's Xalan for Java
(http://xml.apache.org/xalan-j/).

If you are already using such a library and are still seeing
this message then confirm that you are using the Endorsed
Standards Override Mechanism.

* Place the jars in the <java-home>/lib/endorsed directory,
where <java-home> is where the runtime software is installed.

The following methods do not work:

* Using the CLASSPATH environment variable or using -
classpath to place the new classes in the classpath.
* Using the -jar option to explicitly execute the classes
inside the new jar files.

See http://xml.apache.org/xalan-j/faq.html#faq-N100D6 for more
information on ESOM and Xalan.
```

---

```
See http://java.sun.com/j2se/1.5.0/docs/guide/standards/ for
more information on ESOM.
```

- 4 Enter the target path for the installation. If no path is entered the default path (indicated by the square brackets) will be used.

```
Please enter the path to the directory under which
business.gov.au Java Syndication is to be installed:
Or press enter for the default: [/usr/local/bepsyndication/]
```

- 5 Enter the target path where syndicated data will be downloaded to. If no path is entered the installation path specified in step 4 will be used.

```
Please enter the path to the directory to hold downloaded XML:
Or press enter for the default:
[/usr/local/bepsyndication/contentxml/]
```



#### Important

Each time the syndication refresh job is executed, **ALL FILES** contained in the specified path will be overwritten. Please ensure that you **DO NOT** enter a path that contains any important or system data such as images, CSS or associated HTML pages.

It is recommended that you specify a path that is dedicated to receiving syndicated data only.

- 
- 6 Enter the target path where syndicated data will be transformed to HTML. This path is usually within your website's file structure. If no path is entered the installation path specified in step 4 will be used.

```
Please enter the path to the directory to hold the generated
HTML:
Or press enter for the default:
[/usr/local/bepsyndication/contenthtml/]
```

For a typical Linux/Apache install the target path would be */var/www/html/syndication*.



#### Important

Each time the syndication refresh job is executed **ALL FILES** contained in the specified path will be overwritten. Please ensure that you **DO NOT** enter a path that contains any important or system data such as images, CSS or associated HTML pages.

It is recommended that you specify a path that is dedicated to receiving syndicated data only.

- 
- 7 If you use a proxy server to connect to the internet enter it here, otherwise leave blank and skip to step 8.

```
If you use a proxy server please enter the proxy hostname:
(Leave blank for no proxy)
proxy

Please enter the proxy port:
Or press enter for the default: [80]
8080
```

- 8 Enter your Unique Identifier (UID) as provided by business.gov.au.

```
Please enter your business.gov.au Syndication Partner UID,
supplied by business.gov.au: XOXOXOXO
```

- 9 Finally, review the values entered during the installation and confirm if correct.

```
## Confirm Installation Details ##
Installation Directory: /usr/local/bepsyndication/
XML Directory: /usr/local/bepsyndication/contentxml/
HTML Directory: /usr/local/bepsyndication/contenthtml/
Proxy Server: proxy:8080
business.gov.au Syndication Partner UID: XOXOXOXO
Proceed with installation? (y/n)
```

Once you confirm that the script should proceed, installation will complete, copying necessary files to the locations specified. You can now run syndication using the command *bepsyndication.sh* from within the installation path specified at step 4.

```
$ cd /usr/local/bepsyndication ; ./bepsyndication.sh
```



As per the requirement of the MOU signed between your organisation and business.gov.au the syndication tool should be scheduled to run on a daily basis - see the following section for more details on Scheduling.

---

## Scheduling

business.gov.au syndication data changes frequently and it is a requirement of the MOU your organisation signed with business.gov.au that syndication data be updated daily.

The syndication tool provided by business.gov.au can help manage this routine process for you. It will download fresh syndication data and transforms it to HTML based on XSL style sheets.

All modern operating systems provide a scheduling utility, allowing you to easily automate the daily refresh of syndication data.

---

## Java scheduling using the Cron subsystem

All modern UNIX-like platforms such as Solaris and Linux come with the Cron subsystem. Cron includes the Cron Daemon<sup>1</sup> which executes scheduled jobs and Crontab files, where users enter their scheduled jobs. To schedule the syndication service on a daily basis using Cron, follow these steps:

- 1 From a command prompt, logged in as a user with the appropriate permissions to execute BEP JAVA Syndication, type `crontab -e`
- 2 This will open your user's Crontab file in your default editor. If you have any other Cron entries, these will be displayed, otherwise it will be an empty file. Add a line to the file which looks like:

```
0 2 * * * cd /path/to/bepsyndication && ./bepsyndication.sh
```

The 0 is for minutes and the 2 is for hours, meaning the command will run daily at 2:00am. The `cd` command is present because it is important that you invoke BEP syndication from the directory it was installed to for it to function properly.

Cron executes with its own environment variables, so you may need to add explicit paths if executing `java` with the correct `CLASSPATH` depends upon your user's profile. For example, if your user uses the bash shell, you could execute his profile first by editing the line to read:

```
0 2 * * * . ~/.bash_profile && cd /path/to/bepsyndication && ./bepsyndication.sh
```

- 3 Save the file and exit, then wait for syndication to run according your scheduling. You will receive a local mail from the Cron Daemon indicating the success or failure of your scheduled job.

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<sup>1</sup> **Cron Daemon**, The Cron Daemon runs shell commands at specified date and times.

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# Look & Feel Customisation

Once you have successfully installed the Syndication Toolbox, you can change the styling of the published HTML to reflect the look and feel of your website. This is achieved by editing the XSL style sheets that are provided as part of the Syndication Toolbox.

## Existing Syndication Partners

As part of the upgrade process, you will be required to update your existing XSLT style sheets to cater for the change in content structure. To make this process easier we have developed a transformation tool that will automatically update your XSLT to work with the upgraded version.

### XSLT Upgrade for Legacy Partners

This process takes the following 3 XSL files, located in the old business.gov.au installation folder and transforms them into 4 XSLT files, as listed below.

Existing XSL	Transformed XSLT
List.xsl	RootContainer.xslt
Channel.xsl	Container.xslt
Channel.xsl	Item.xslt
Common.xsl	Common.xsl

#### Note

Although Common.xslt is not part of the upgraded syndication package it is still required to maintain your existing look and feel. Note also that Channel.xsl is used to create 2 XSLT files – Container.xslt and Item.xslt.

Please feel free to contact the syndication team if you require any assistance with this process – [syndication@business.gov.au](mailto:syndication@business.gov.au)

#### Transform List.xsl to RootContainer.xslt

- 1 Login to the syndication website – [www.syndication.business.gov.au](http://www.syndication.business.gov.au) – and select the Tools page and scroll down to the XSLT Upgrade for Legacy Partners, pictured below.

	From	To
Conversion:	<input type="radio"/> List.xsl	RootContainer.xslt
	<input checked="" type="radio"/> Channel.xsl	Container.xslt
	<input type="radio"/> Channel.xsl	Item.xslt
	<input type="radio"/> Common.xsl	Common.xsl

Source File:

- 2 Select the **List.xsl** radio button.
- 3 Select the **Browse** button and navigate to the existing syndication directory and select **List.xsl**
- 4 Select the Convert button. The next page that is displayed is the transformed version of your XSLT – **RootContainer.xslt**
- 5 Select **File > Save As** and locate the **XML** directory of the new syndication installation.
- 6 Select the existing **RootContainer.xslt** file and select **Save** to replace the existing version.
- 7 Push the **Back** button on your web browser to return to the Tools page.

### Transform Channel.xsl to Container.xslt

- 1 Select the **Channel.xsl** radio button.
- 2 Select the **Browse** button and navigate to the existing syndication directory and select **Channel.xsl**
- 3 Select the **Convert** button. The next page that is displayed is the transformed version of your XSLT – **Container.xslt**
- 4 Select **File > Save As** and locate the **XML** directory of the new syndication installation - **C:\Program Files\business.gov.au\Syndication**.
- 5 Select the existing **Container.xslt** file and select **Save** to replace the existing version.
- 6 Push the **Back** button on your web browser to return to the Tools page.

### Transform Channel.xsl to Item.xslt

- 1 Select the next Channel.xsl radio button (Converts to Item.xslt).
- 2 Select the **Browse** button and navigate to the existing syndication directory and select **Channel.xsl**
- 3 Select the **Convert** button. The next page that is displayed is the transformed version of your XSLT – **Item.xslt**
- 4 Select **File > Save As** and locate the **XML** directory of the new syndication installation - **C:\Program Files\business.gov.au\Syndication**.
- 5 Select the existing **Item.xslt** file and select **Save** to replace the existing version.
- 6 Push the **Back** button on your web browser to return to the Tools page.

### Transform Common.xsl to Common.xsl

- 1 Select the **Common.xsl** radio button.
- 2 Select the **Browse** button and navigate to the existing syndication directory and select **Common.xsl**

- 
- 3 Select the **Convert** button. The next page that is displayed is the transformed version of your XSL – **Common.xsl**
  - 4 Select **File > Save As** and locate the **XML** directory of the new syndication installation - **C:\Program Files\business.gov.au\Syndication**.
  - 5 Name the file as **Common.xsl** and **Save**.
  - 6 Push the **Back** button on your web browser to return to the Tools page.

Your XSLT files are now ready to transform and publish the upgraded syndication content. Continue on to Chapter 4 – **Using the Syndication Tools** - where you will find instructions on how to check that the new syndication content is transforming and publishing correctly.

---

## New Syndication Partners

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### Important!

As stated in the MOU, the business.gov.au logo as displayed below must be displayed on each page of content that is sourced via the syndication service. In addition to acknowledging the source of the content, the business.gov.au logo provides the means to capture key statistics for use by both parties.



This process relies upon the business.gov.au logo being downloaded from business.gov.au each time a page is viewed on your site as opposed to having the image stored locally on your web server.

The capturing and recording of statistical information allows us to not only improve the content and service provided, but also monitor the status of the syndication project as a whole.

If you would like further clarification regarding the way in which usage statistics are captured please contact [syndication@business.gov.au](mailto:syndication@business.gov.au)

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## Style Sheet Customisation

This section explains how to modify the default style sheets to integrate syndicated content into your own website using your own look and feel.

Please note that XSL style sheets should only be changed if structural or major formatting changes to the format of HTML are required. If minor presentation changes to the HTML are required, look at changing the Sample.css (Cascading style sheet) file instead.

The following 3 XSL Style Sheets come with the Syndication Toolbox:

1. **RootContainer.xslt**
2. **Container.xslt**
3. **Item.xslt**

---

All three style sheets are located in the default installation folder:

**C:\Program Files\business.gov.au\Syndication\Xml**

## **RootContainer.xslt**

The RootContainer.xslt style sheet is used to transform the root container XML into the HTML file default.htm. This is the 'main page' of syndicated content, providing links to the top level containers. It shows the title, description and a hyperlink for each top level container.

### **Note**

In accordance with the MoU 'you must display the business.gov.au logo and a link back to the business.gov.au home page on the section of your site that contains the syndicated business.gov.au content' and you must display links to the business.gov.au copyright, privacy and disclaimer statements'.

## **Container.xslt**

The Container.xslt style sheet is used to transform containers other than the root container into HTML. These are navigational pages, providing links to lower levels of containers and to individual items. They show the title, description and a hyperlink for each child container or item.

## **Item.xslt**

The Item.xslt style sheet is used to transform the XML describing individual content items into HTML. Items are pages of information relating to a specific topic, and are the real 'meat' of the content provided by business.gov.au Syndication. Each item displays a title and a HTML body consisting of authored content relevant to the topic.

# Using the Syndication Tools

## Java Dashboard

Once the Syndication Tools application has been successfully installed you can use the dashboard application to configure and manage a range of tasks as outlined below. The following section, **Syndication Toolbox Operation**, covers each function in more detail.

### 1. Filter Content

The **Filter Content** function enables you to filter the content that you wish to publish to your website, allowing you to select only the content that you feel is most relevant to users of your website.

### 2. Download Syndication Content

The **Download Syndicated Content** function allows you to manually request the latest content from business.gov.au.

### 3. Change Account Details

The **Change Account Details** function allows you to access and edit your syndication account details online.

### 4. Change Publishing Folder

The **Change Publishing Folder** function allows you to change the location of the folder that business.gov.au content is published to on your system, allowing you to ensure the quality of published HTML before deploying it to your production website.

### 5. Contact Syndication

The **Contact Syndication** function launches a web-based mail form that will be sent to the Syndication Support Team.

### 6. Help

The **Help** function launches a web based version of this guide.

### 7. Close

The **Close** function closes the java dashboard application. Note that the dashboard does not need to be running in order to receive the daily syndicated content feeds.

## Syndication Toolbox Operation

To launch the Syndication Toolbox use the command *bepsyndication.sh* from within the installation path specified at step 4 of the installation instructions.

```
$ cd /usr/local/bepsyndication ; ./bepsyndication.sh
```

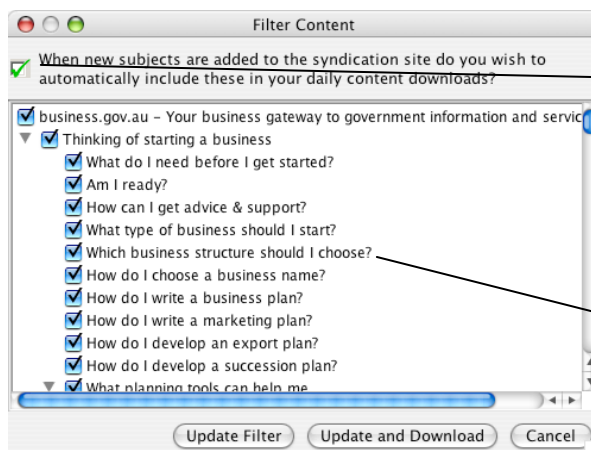
The following screen will be launched.



## 1. Filter Content



Pressing the **Filter Content** button launches the Filter Content interface, which allows you to choose whether or not you wish to include new content items provided by business.gov.au to be automatically included in your syndicated content feed. It also allows you to select content items that are most relevant to your website.



**New Subject Notification Checkbox.**

**Tick** - New subjects will be automatically added to your list of syndicated content downloads.

**Cross** - New subjects will not be added to your list of syndicated content downloads.


**Content Items**

Checked items will be included in your syndicated content download.


### New Subject Notification Checkbox

Due to the nature of the content provided by business.gov.au, new content items will sometimes be made available for publishing on to your website.

---

 A ticked checkbox indicates that all new items will be automatically added to your syndicated content feed and published to the output folder specified during the installation process. To stop receiving automatic updates, simply click on the green tick.

---

 A crossed checkbox indicates that you do not wish to receive new content items automatically. To activate automatic updates, simply click on the red cross to change its status to a green tick.

---

## Content Items

Content items are displayed in a hierarchical manner and grouped into relevant subjects. By default, all available content items are selected and published to the folder specified during the installation process.

### Note

When an item is deselected, all sub-items that are below it in the structure will also be deselected as they rely upon a parent content item to create linkages.

## Update Your Syndicated Content

Once you have decided which content items you wish to publish to your website select the **Update Filter** button which will refresh your content. The contents of your destination folder will be replaced with only the selected items.

## 2. Download Syndicated Content



By default, syndicated content items are scheduled to download at 2am in the morning on a daily basis. You can also manually download content by selecting the **Download Syndicated Content** button. This will result in the contents of your destination folder being updated with the latest content from business.gov.au and incorporate any changes you have made to the styling of the content.

Note that the manual process does not stop or replace the scheduled process but is intended to be used for testing purposes. For example you may wish to check the final styling and layout of the content before making it available on your website or immediately update any changes you make.

## 3. Change Account Details



Selecting the **Change Account Details** button will launch your default web browser and connect you to the syndication login page. Once you have logged in with your username and password you can edit your details – **Edit Profile**, access the business.gov.au **RSS Feeds**, download installation **Tools** and access **Help and FAQs**.

---

## Edit Profile

Clicking on the Edit Profile link allows you to update your **Contact Information, Website Information** and Login **Password** as pictured below.

**Mandatory fields in red**

---

**Contact information**

ID:

Business name:

Position:

**First name:**   
Please provide first name

**Surname:**   
Please provide surname

**Email:**   
Please provide email

Telephone:

**Country:**  ▼

**Postcode: \*Mandatory if in Australia**   
Please provide correct Australian postcode

---

**Website information**

Website name:

Website URL:

---

**Password**

**New password:**

**Confirm new password:**

---

**Save or cancel**

Changes can be made to all of the above fields with exception to your ID. Mandatory fields are indicated by red text. Select the **Update** button to save your changes or **Cancel** to exit without updating your details.

---

## RSS Feeds

One new feature of the redevelopment is the Really Simple Syndication (RSS) service. This feed can be easily viewed using RSS Newsreaders (available to download for free from the internet) or be published on websites. Many website content management systems now include the ability to incorporate RSS feeds as a standard feature.

## Tools

The Tools section of the Content Syndication website contains the downloadable installation packages for the Syndication Toolbox. For more information on installing and using the different versions of the Syndication Toolbox - Windows, Java or PHP - please refer to the relevant user guide.

## Help & FAQs

The Help and FAQ section of the Content Syndication website contains an online link to this guide as well as access to a Frequently Asked Questions section. Remember that if you are experiencing any problems with the installation and use of this package do not hesitate to contact the syndication team – [syndication@business.gov.au](mailto:syndication@business.gov.au)

## 4. Change Publishing Folder



During the installation process you will have specified a folder where your syndicated content will be automatically published to. By selecting the **Change Publishing Folder** link you can **Select a New Folder** or **Make a New Folder** to where content will be published.



### Warning!

Each time the syndication refresh job is executed **ALL FILES** contained in the folder specified in the next step will be overwritten. Please ensure that you **DO NOT** select a folder that contains any important or system data such as images, CSS or associated HTML pages.

## 5. Contact Syndication



Selecting the **Contact Syndication** button will launch a web based form which will be emailed to the business.gov.au Syndication Team. Please include as much detail as possible about the problem you are experiencing and we will get back to you as soon as possible.

---

## 6. Help



Select the **Help** button to launch an online version of this guide. Should you require further assistance, please use the feedback form accessible via the **Contact Syndication** button.

## 7. Close



Selecting the **Close** button closes the Syndication Toolbox. Note that it is not necessary to have the Toolbox open for the daily refresh process to execute and publish business.gov.au to your destination folder.