

Setup of local BarTender Print Portal for Abakion Labels Mobile

This guide describes how to deploy a default setup of BarTender on your on-premises print server, to use with Abakion Labels Mobile for Business Central Online.

It is expected that you have already installed Labels Mobile in your Business Central environment.

You can find more info about Labels Mobile and install it from:

<https://abakion.com/dynamics-365/apps/labels-mobile/>

System Requirements

Recommended system requirements for the print server:

- Windows Server 2022, 2019 and 2016.
- 8 GB memory.
- 20 GB free disk space.
- Internet Information Services.
- .NET Framework 4.7.2 or later version.
- Updated Edge or Chrome browser.
- BarTender 2022 Automation Edition license. *

**Info: A 30-days trial license for BarTender can be acquired at Seagull's website.*

Before you start

Before following the steps in this guide, please verify by setting a checkmark that the following outlined prerequisites are in place. This is very important for a successful result.

- The server hardware and software align with the above-listed requirements.
- The firewall must allow traffic on port TCP/443 to the server from the internet. *
- A public DNS record is set up to point at the server - ex. 'bartender.company.com'.
- An SSL certificate issued by a trusted provider and matching the DNS record, is installed on the server **

**Info: If TCP/443 is already in use, you can use any unused TCP-port above 1023.*

***Info: If you own a wildcard certificate for your domain, you can most likely reuse that.*

Install BarTender

You can download BarTender from: <https://www.seagullscientific.com/support/downloads/>

This guide is based on BarTender 2022. The same configuration might be possible with other versions, but the instructions in this guide may not match the software.

Run the downloaded installation program and follow the steps.

- Click the checkmark to accept the license agreement.
- Click the checkmark to specify advanced installation options.
- Select the “BarTender with Print Portal” install option.
- Ensure that the “Add Microsoft SQL Server Express” option is checked. *
- Provide a complex password for the IIS_WEBPRINT service account. **

**Info: It is possible to use your own SQL Server, but it is not covered by this guide.*

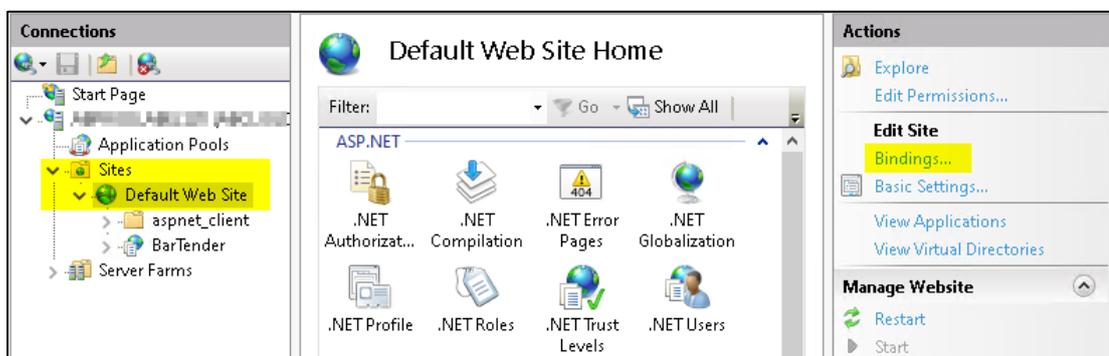
***Info: It is recommended to provide a complex password and store it in a secure password vault.*

The installation can take some time. Please grab a cup of coffee.

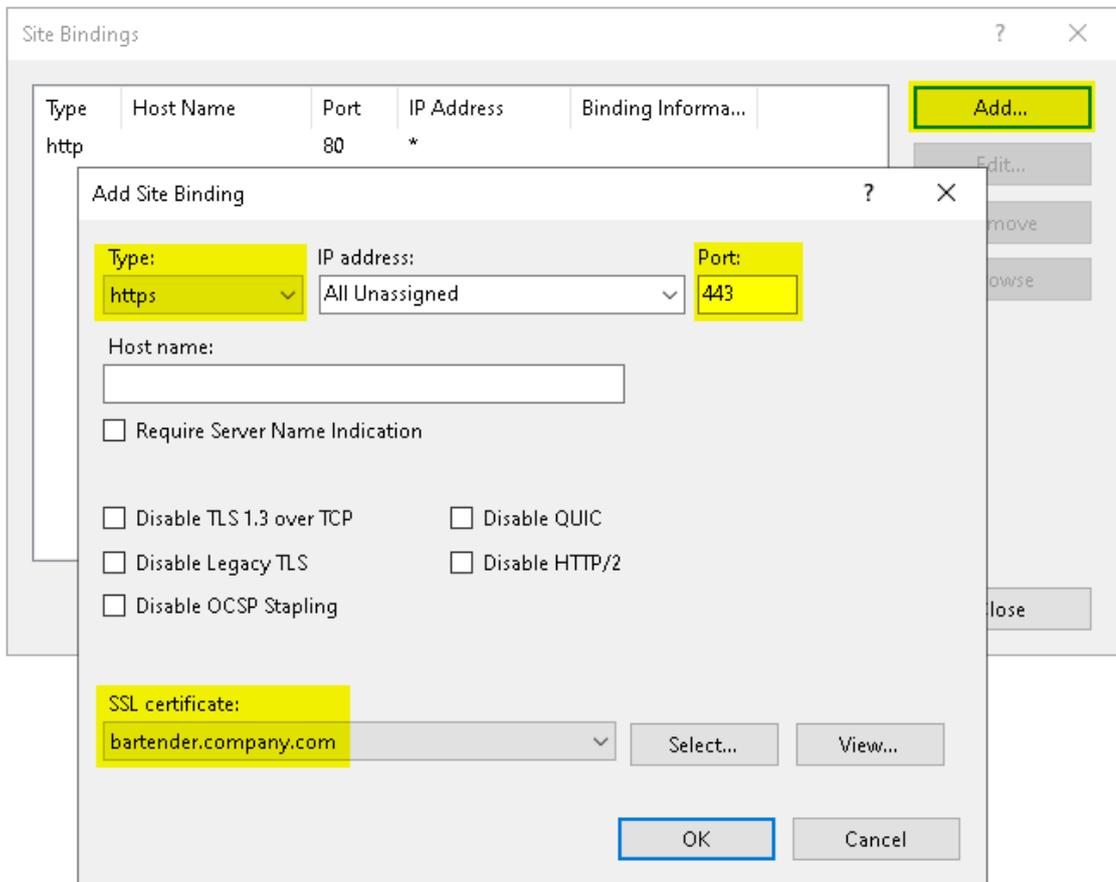
After the setup has completed, you must provide your License Key, to activate BarTender.

Add the SSL certificate to BarTender Print Portal

- Open Internet Information Services (IIS) Manager.
- Select the site that contains a “BarTender” subfolder and click on **Bindings**.
In most cases it will be the site named “Default Web Site”.



- Click **Add**, select type “https”, port 443 and your certificate installed as a prerequisite.



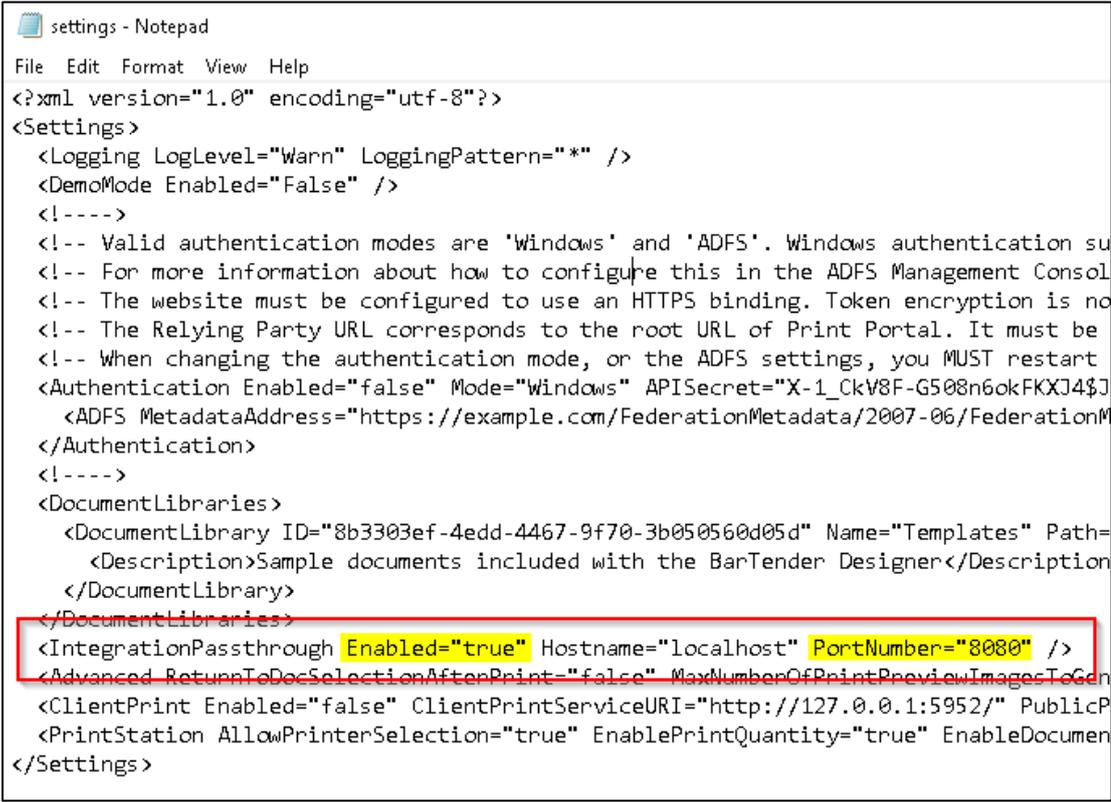
The certificate should match your own DNS-record. The name of the certificate could be anything, but if you click the **View** button, your DNS record, or a wildcard for your domain, should be shown after **Issued to**. The image below is just an example.



Activate Integration Passthrough for BarTender Print Portal

The BarTender Print Portal must be configured to pass through the incoming webservice request to the integration service. We change the port number to 8080 to avoid possible conflicts. If you decide to use another port number, you should also change it in the supplied integration file, but that is not covered by this guide.

- Open **Print Portal** from Start Menu, wait for site to load, and close it again.
That is to ensure the default settings file is created.
- Open **Notepad as Administrator** from Start Menu and open the file:
 - C:\inetpub\wwwroot\BarTender\settings.xml
- Find the **IntegrationPassthrough** element.
 - Change **Enabled** from "false" to "true".
 - Change **PortNumber** from "80" to "8080".
- Close and save the file.



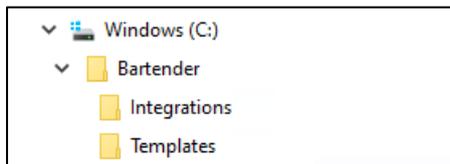
```
settings - Notepad
File Edit Format View Help
<?xml version="1.0" encoding="utf-8"?>
<Settings>
  <Logging LogLevel="Warn" LoggingPattern="*" />
  <DemoMode Enabled="False" />
  <!-- Valid authentication modes are 'Windows' and 'ADFS'. Windows authentication su
  <!-- For more information about how to configure this in the ADFS Management Consol
  <!-- The website must be configured to use an HTTPS binding. Token encryption is no
  <!-- The Relying Party URL corresponds to the root URL of Print Portal. It must be
  <!-- When changing the authentication mode, or the ADFS settings, you MUST restart
  <Authentication Enabled="false" Mode="Windows" APISecret="X-1_CkV8F-G508n6okFKXJ4$J
    <ADFS MetadataAddress="https://example.com/FederationMetadata/2007-06/FederationM
  </Authentication>
  <!-- DocumentLibraries>
  <DocumentLibrary ID="8b3303ef-4edd-4467-9f70-3b050560d05d" Name="Templates" Path=
    <Description>Sample documents included with the BarTender Designer</Description
  </DocumentLibrary>
  <IntegrationPassthrough Enabled="true" Hostname="localhost" PortNumber="8080" />
  <Advanced_ReturnToDocSelectionAfterPrint="false" MaxNumberOfPrintPreviewImagesToGen
  <ClientPrint Enabled="false" ClientPrintServiceURI="http://127.0.0.1:5952/" PublicP
  <PrintStation AllowPrinterSelection="true" EnablePrintQuantity="true" EnableDocumen
</Settings>
```

- Open **Services** from Start Menu and restart the **BarTender System Service** service.
- Open **Command Prompt** from Start Menu *as Administrator* and execute "IISRESET".

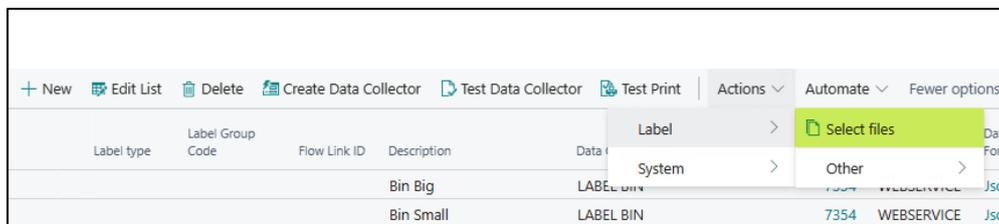
Download Abakion's example files

Abakion has designed a set of labels templates. These are only supplied for educational purposes. When you become familiar with Labels Mobile and BarTender, you should produce your own templates.

To take advantage of our templates you should download and extract them on the print server, in a folder structure like this:



- Search for **Labels Mobile documents** in Business Central and open the page.
- Navigate to **Actions -> Label -> Select Files**

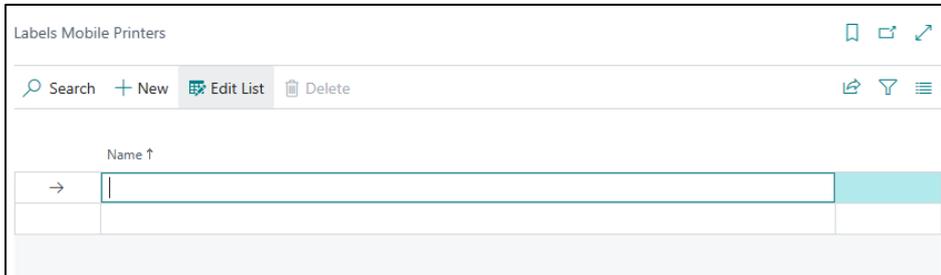


- Download **ABA_BartenderTemplates.zip** and extract the files to **C:\Bartender\Templates**
- Download **LabelsMobile.btin** file to **C:\Bartender\Integrations**

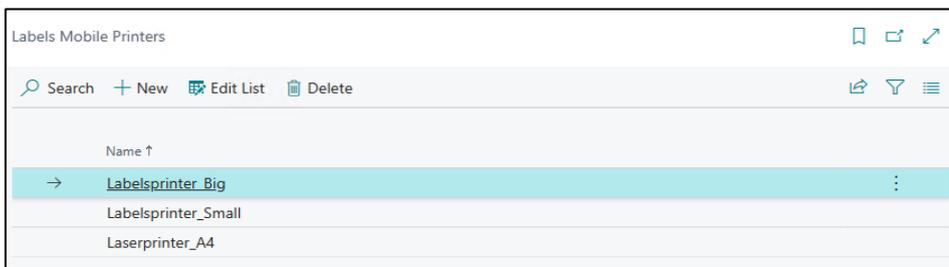


Setup your label printers in Labels Mobile

- Search for **Labels Mobile Printers** in Business Central and open it.
- Add records with the printers **shared printer names** (without any blanks).



Here is an example, where we have added 3 different printers, which we later can select and use in **Labels Mobile Documents**.



- Search for and open **Labels Mobile Documents**, click on **Edit List** and select printers for the different labels, by clicking on the empty field for printer name.
- Now select one of the printers you created earlier under **Labels Mobile Printers** for the label with Label Code "ITEM BIG". You must press **Edit list** before you can edit the column.

Label Code ↑	Description	Data Collector (Flow)	Source Table	Printing Method	Data Transfer Format	Layout File Name	Printer Name
BIN BIG	Bin Big	LABEL BIN	7354	WEBSERVICE	Json	ABA_Big_Bin.btw	-
BIN SMALL	Bin Small	LABEL BIN	7354	WEBSERVICE	Json	ABA_Small_Bin.btw	-
INV PUT-A...	Inventory Put-Away	LABEL PUT-A...	5767	WEBSERVICE	Json	ABA_A4 ReceiptLabel.btw	-
ITEM A4	Item A4	LABEL ITEM	27	WEBSERVICE	Json	ABA_A4 itemLabel.btw	-
→ ITEM BIG	Item Big	LABEL ITEM	27	WEBSERVICE	Json	ABA_BigItemLabel.btw	-
ITEM S/N_L...	Item Entry Lot/Expiration ...	LABEL ILE	32	WEBSERVICE	Json	ABA_ItemLot-Sn.btw	-

Here you can see the result.

Label Code ↑	Description	Data Collector (Flow)	Source Table	Printing Method	Data Transfer Format	Layout File Name	Printer Name
BIN BIG	Bin Big	LABEL BIN	7354	WEBSERVICE	Json	ABA_Big_Bin.btw	-
BIN SMALL	Bin Small	LABEL BIN	7354	WEBSERVICE	Json	ABA_Small_Bin.btw	-
INV PUT-A...	Inventory Put-Away	LABEL PUT-A...	5767	WEBSERVICE	Json	ABA_A4 ReceiptLabel.btw	-
ITEM A4	Item A4	LABEL ITEM	27	WEBSERVICE	Json	ABA_A4 itemLabel.btw	-
→ ITEM BIG	Item Big	LABEL ITEM	27	WEBSERVICE	Json	ABA_BigItemLabel.btw	Labelsprinter_Big

Configure URL for BarTender Print Portal in Business Central

- Log into Business Central and search for the **Labels Mobile Printing Methods** page.
- Insert the URL below as Integration URL for the method line with Code “WEB”.
*Replace “bartender.company.com” with your own DNS record.
The URL is one long line, without any spaces.*

```
https://bartender.company.com/BarTender/API/IntegrationServicePassthrough?targetURL=/Integration/LabelsMobile/Execute
```

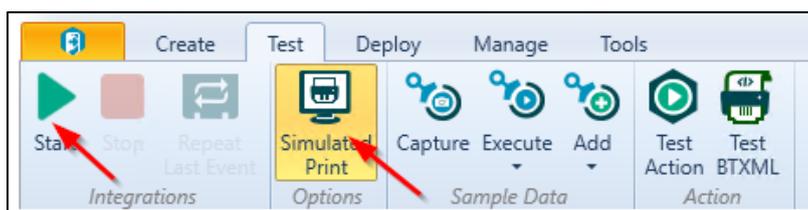
It will look like this.

Code ↑	Description	Integration Type	Integration URL
TEST		None	
→ WEB	:	Web Service	https://bartender.company.co...

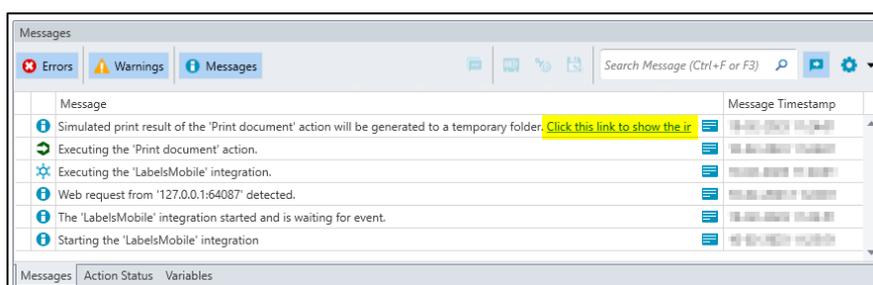
- Verify that **Integration Type** for the method is set to “Web Service”.

Test the BarTender Integration Service

- Run the file **LabelsMobile.btin** from **C:\Bartender\Integrations**. This will open the BarTender **Integration Builder** with our Labels Mobile sample webservice integration.
- Navigate to the **Test** tab, activate **Simulated Print** and click **Start**.



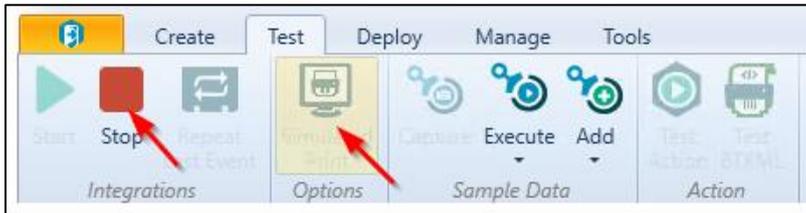
- When you print from Labels Mobile in Business Central, you can follow the status in the **Messages** section, including a link to the simulated labels print.



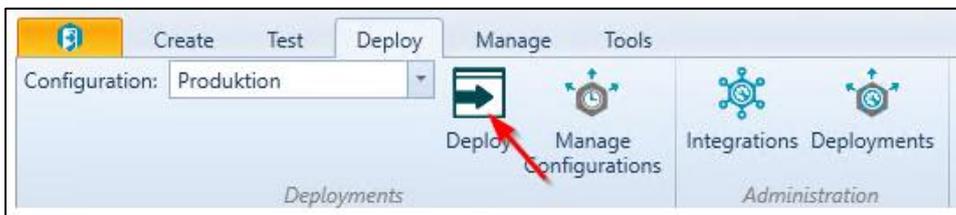
Deploying BarTender Integration Service

When your test print has been verified, BarTender Integration can be deployed.

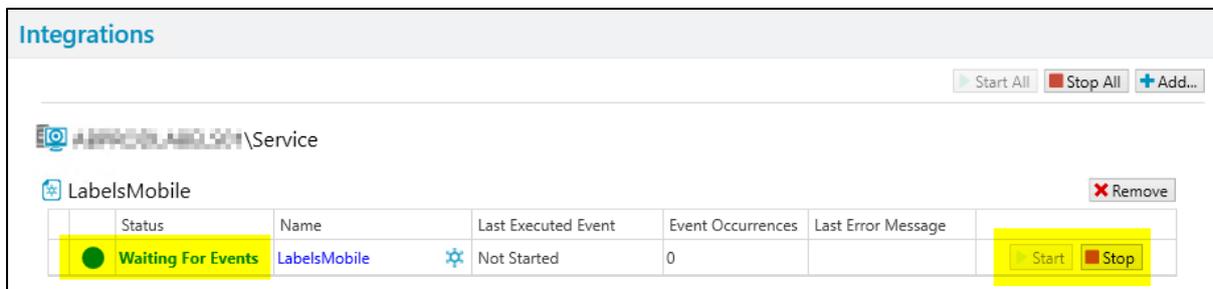
- Remember to first stop simulated print. Click on **Stop** and deactivate **Simulated Print**.



- Navigate to the **Deploy** tab, click **Deploy** and confirm to **Deploy now** in the popup window.



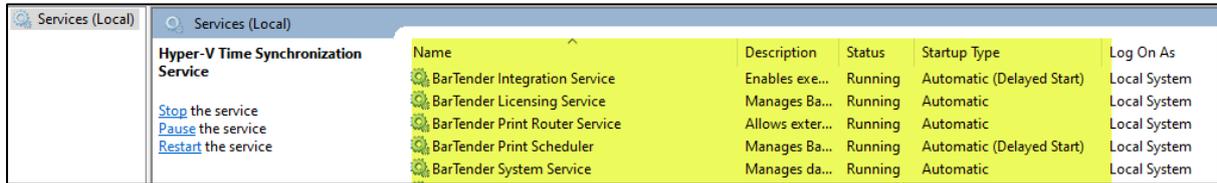
You can now verify that the BarTender Integration is running by opening the BarTender **Administration Console** and clicking on **Integrations** in the left menu. When the BarTender integration has been deployed, the integration starts automatically whenever then print server has been rebooted.



If you are planning to use the **Simulated print** for testing purposes, you must stop the deployed integration before you start the BarTender integration service, since the integration is using the same port. Remember after testing, to stop the **Simulated Print** and restart the integration from the **Administration Console**.

Troubleshooting BarTender Services

If the BC Integration fails, we suggest you restart all the BarTender services on the print server before you contact Abakion Frontdesk.



The screenshot shows the Windows Services console for 'Services (Local)'. The 'Hyper-V Time Synchronization Service' is selected in the left pane. The right pane displays a list of services:

Name	Description	Status	Startup Type	Log On As
BarTender Integration Service	Enables exe...	Running	Automatic (Delayed Start)	Local System
BarTender Licensing Service	Manages Ba...	Running	Automatic	Local System
BarTender Print Router Service	Allows exter...	Running	Automatic	Local System
BarTender Print Scheduler	Manages Ba...	Running	Automatic (Delayed Start)	Local System
BarTender System Service	Manages da...	Running	Automatic	Local System

Adding new users to Mobile labels

Search for **Assisted Setup** in BC, and select and run **Setup Mobile Flow users**.



The screenshot shows the 'Assisted Setup' interface in Business Central. It includes a search bar, 'Start Setup' button, and 'General Videos' link. Below is a table of setup wizards:

Title	Completed	Learn more	Description
Set up Mobile Flow Users	<input type="checkbox"/>	Read	This wizard will help you create

The Labels Mobile app uses Abakion's **Mobile Flow Core**, so all Labels Mobile users must also exist as a user in Business Central. The wizard will create the missing resources and link them with a corresponding Mobile flow user.