



# Flex API Deployment

FOR MOBILE DEVICES

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## Table of Contents

System Requirements .....	2
DNA Fusion 6.....	2
Installing Flex API .....	3
Configuring the service .....	5
<i>Service Identity</i> .....	5
Configuring the Flex API .....	6
SSL Certificates .....	6
<i>Importing Certificates</i> .....	6
<i>Self-Signed Certificates</i> .....	6
Site Bindings .....	8
<i>Adding a new HTTPS (SSL) binding</i> .....	8
<i>Adding a new HTTP binding</i> .....	9
Connecting the Mobile Device.....	10
iPhone.....	11
Android.....	12



## System Requirements

- Windows XP SP3 or later
- DNA Fusion 6
- Administrator Privileges

### DNA FUSION 6

DNA Fusion version 6 is needed. If you are running an earlier version an upgrade is required. Please feel free to contact Open Options Support and they will guide you through the process of upgrading.



## Installing Flex API

The Flex API must be installed on the same machine as the DNA Fusion driver, the server.

Installing the Flex API involves only a few steps and has only two questions to be answered.

1. Where to place the Flex API.
  - a. The default for 64 bit environments is c:\Program Files (x86)\Flex API
  - b. And for 32 bit environments it is c:\Program Files\Flex API
2. Start menu folder
  - a. The install will attempt to locate where the shortcut was placed for DNA Fusion and install the Flex API shortcut in the same location.

Double click the “Flex API Install.exe” install file and step through the individual dialogs. See figures 1-5. For most installations selecting next and bypassing the dialogs will suffice.





Figure 1 - initial setup dialog

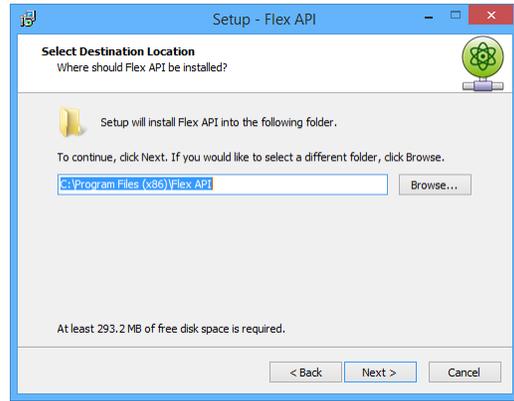


Figure 2 - choose folder location

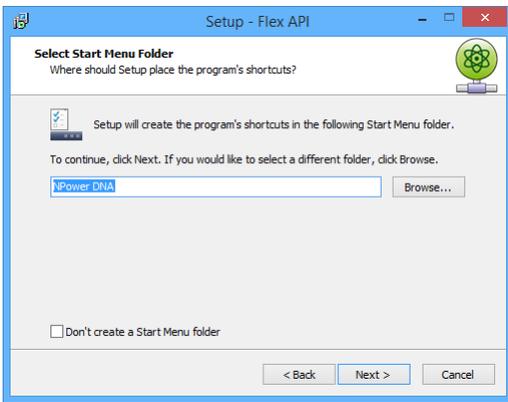


Figure 3 - Start menu program group

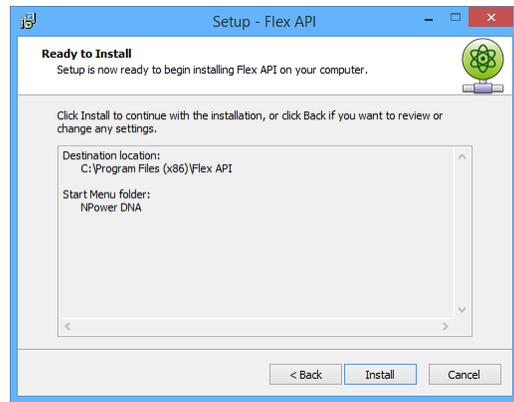


Figure 4 - confirmation

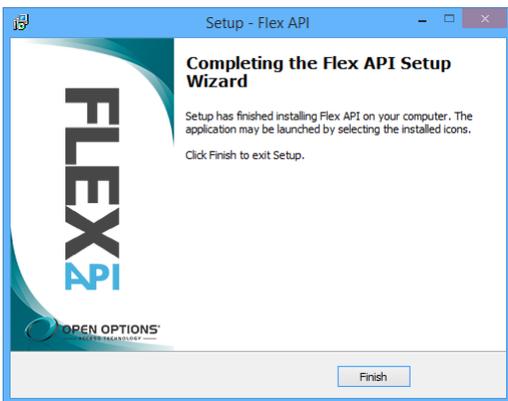


Figure 5 - finished installing



## CONFIGURING THE SERVICE

It is recommended that if the DNA Fusion driver is running under a specific user account that the Flex API service be configured to use the same account as well. This is because the Flex API will need to use the same COM objects, database connections and file permissions as the DNA Fusion driver.

### Service Identity

To configure the service account you must first open the services dialog, by going to:

- Control Panel ->
  - Administrative Tools ->
    - Services (Figure 6)

Scroll down until you find DNADrvr32 and below it dnaFusion Flex. Double-click on the dnaFusion Flex item to display the service properties dialog (Figure 7). Here you can specify the account to use for the service.

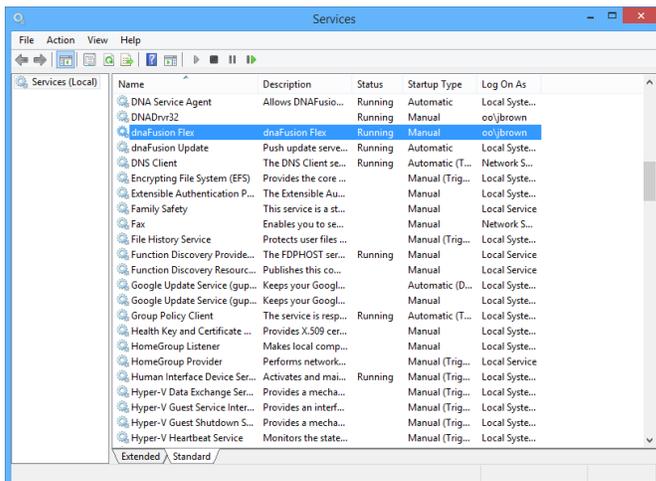


Figure 6 - services dialog

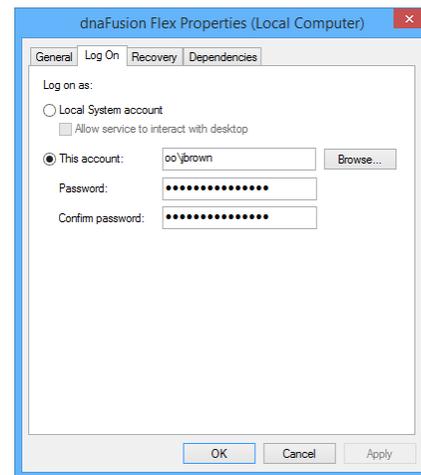


Figure 7 - service properties

## Configuring the Flex API

Very few settings need to be configured for mobile devices to communicate with the Flex API - certificates and bindings.

- Certificates are used to secure the data between the Flex API and the mobile devices.
- Bindings are the ports the application is configured to accept communications on.

### SSL CERTIFICATES

SSL certificates are not required but are highly recommended. The mobile devices, by default, are configured to use SSL certificates. Certificates can be purchased from various different online providers.

### Importing Certificates

Once a certificate has been purchased it must be imported before it can be used.

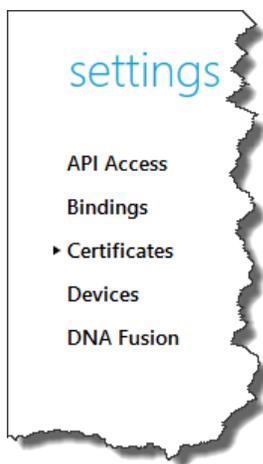


Figure 9 – Certificates

To import a certificate open the Server Certificates view by selecting Certificates on the left hand side under Settings.

Then press the Import Certificate button on the right hand side of the window. This will display the Import Certificate window.

Press the Browse button to locate the PFX certificate file. Then type the password if one is needed. Press OK when finished.

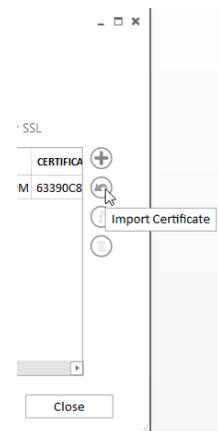


Figure 8 - Import Certificates

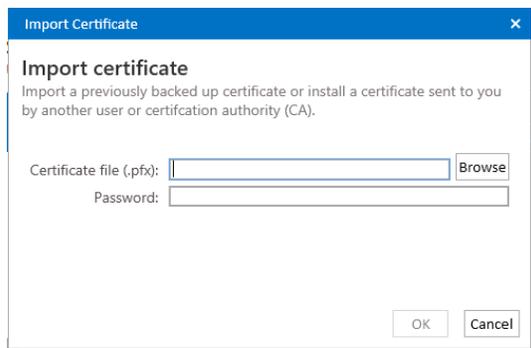


Figure 10 - Import Certificate Dialog

## Self-Signed Certificates

Self-signed certificates can be used for testing or for when a verified certificate is not required. To create a self-signed certificate press the Create Self-Signed Certificate button as show in figure 11.

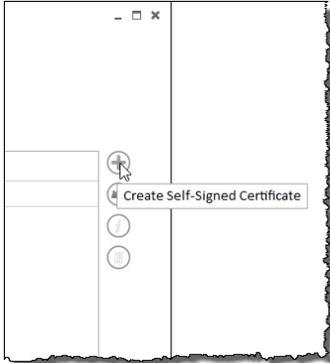


Figure 11 - Create Self-Signed Certificate button

The Create a Self-Signed Certificate dialog will be displayed, it is recommended that the defaults be used, but you will need to enter a friendly name for the certificate. The friendly name is a name that is used to identify the certificate later.

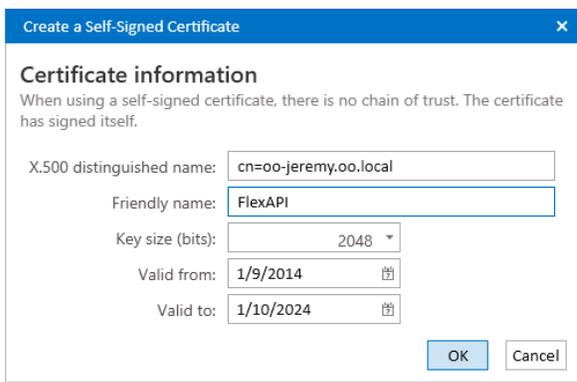
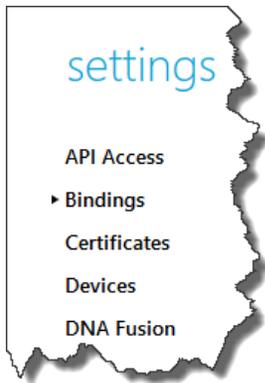


Figure 12 - Create Self-Signed Certificate Dialog

## SITE BINDINGS

Bindings define what ports the Flex API accept communication on. The default listening port is 8888. The default port that web pages use is port 80. The SSL communications default is port 443. Changes to the bindings will require the dnaFusion Flex service to be restarted for the changes to go in effect.

### Adding a new HTTPS (SSL) binding



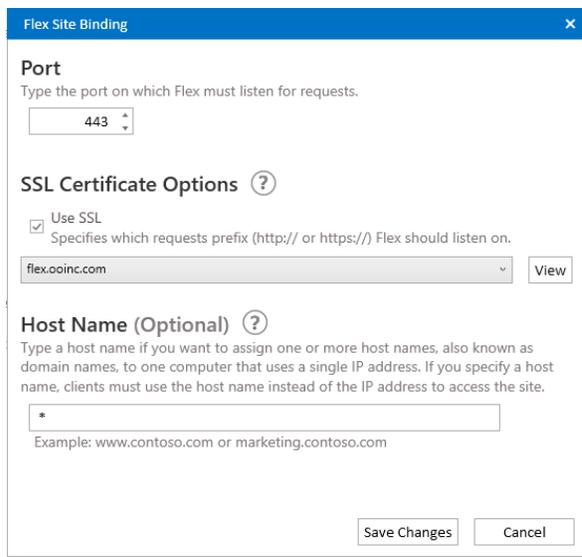
To add a new binding open the Site Bindings view by selecting Bindings on the left hand side under Settings.

Then press the Add Binding button on the right.



Figure 14 – Add Binding

Figure 13 – Bindings

A screenshot of a dialog box titled "Flex Site Binding". It has a blue header bar with a close button (X). The dialog contains three sections: "Port" with a text input field containing "443"; "SSL Certificate Options" with a checked "Use SSL" checkbox and a dropdown menu showing "flex.ooinc.com" and a "View" button; and "Host Name (Optional)" with a text input field containing "\*" and an example text "Example: www.contoso.com or marketing.contoso.com". At the bottom are "Save Changes" and "Cancel" buttons.

Change the port to 443.

Check the checkbox for Use SSL.

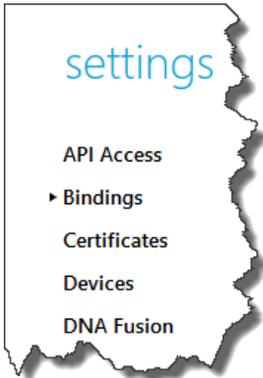
Select the imported SSL certificate or the self-signed certificate.

Press the Save Changes button in the site bindings dialog.

Press the Save Changes button in the main Flex API window.

Figure 15 – Site Binding Dialog

## Adding a new HTTP binding



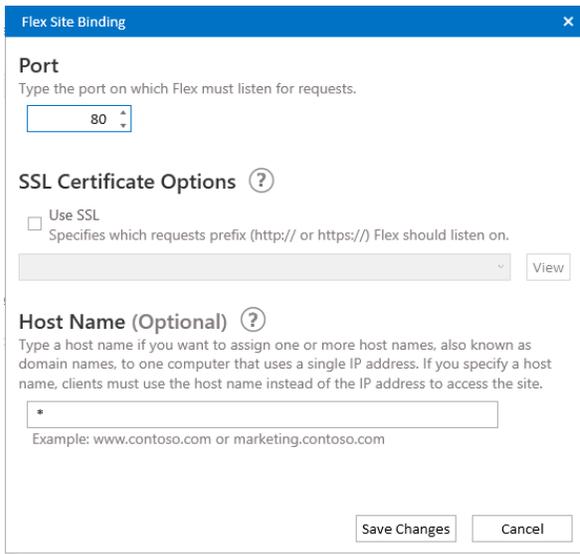
To add a new binding open the Site Bindings view by selecting Bindings on the left hand side under Settings.

Then press the Add Binding button on the right.



Figure 14 – Add Binding

Figure 13 – Bindings



Change the port to 80.

Press the Save Changes button in the site bindings dialog.

Press the Save Changes button in the main Flex API.

Figure 15 – Site Binding Dialog

## Connecting the Mobile Device

For the mobile device to connect to the Flex API it must know the host name of the machine or the IP address. The Flex API provides some of this information to make it easier to find. The About view shows the computers host name and all available IP addresses.

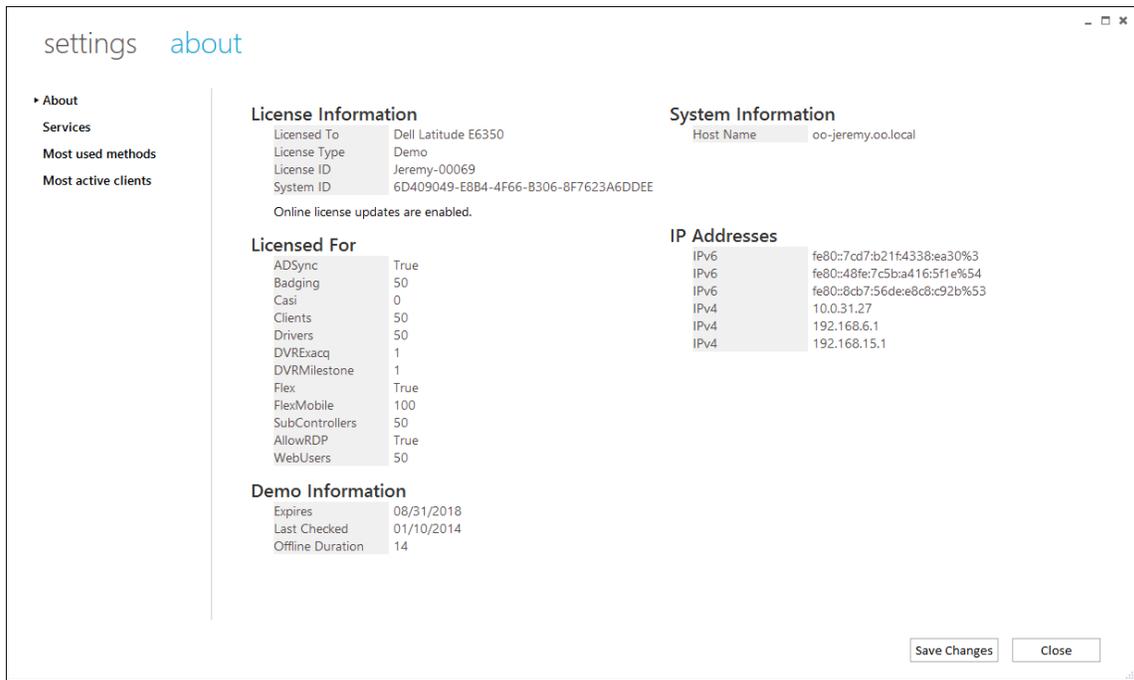


Figure 136 - About view showing hostname and IP address.

In figure 16 we can see that the hostname is oo-jeremy.oolocal.

## IPHONE

Start the DNA Fusion application on the iPhone.

Press the Settings button. If you are using SSL type the host name as is. If you are not using SSL then you must type http:// before the hostname.

If using a self-signed certificate then the switch “Ignore bad certificates” must be turned on.

If using a valid SSL certificate then the switch can be either on or off.

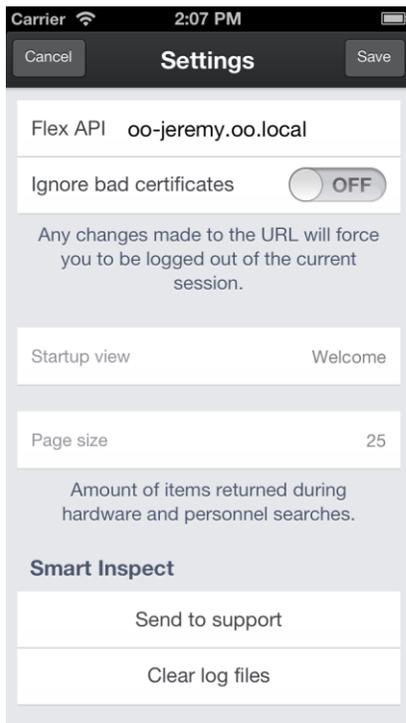


Figure 17 using SSL

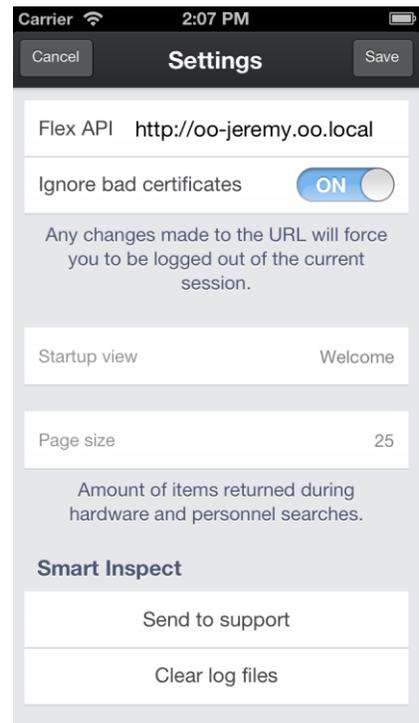


Figure 18 not using SSL

## ANDROID

Start the DNA Fusion application on the Android.

Press the Settings button. If you are using SSL type the host name as is. If you are not using SSL then you must type http:// before the hostname.

If using a self-signed certificate then the switch “Ignore bad certificates” must be turned on.

If using a valid SSL certificate then the switch can be either on or off.

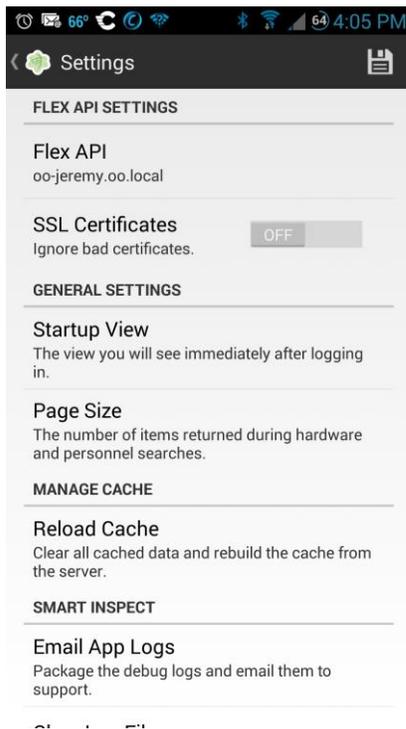


Figure 17 using SSL

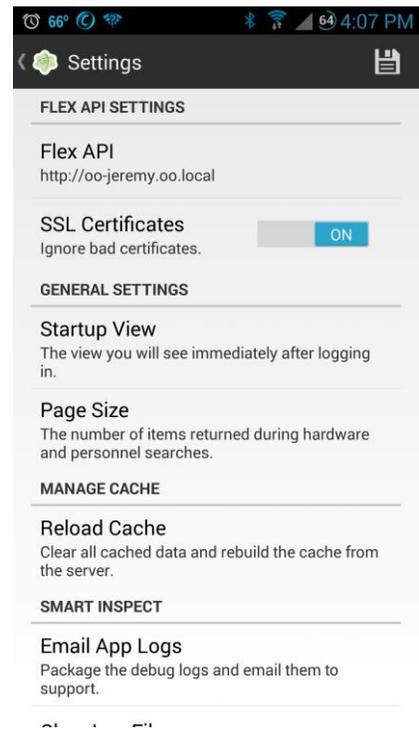


Figure 18 not using SSL