

Flex API Deployment

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System Requirements

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

DNA FUSION 6

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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 3 - Start menu program group



Figure 5 - finished installing

阏	Setup - Flex API 🛛 🗕 🗆 🗙							
9	Select Destination Location Where should Flex API be installed?							
	Setup will install Flex API into the following folder.							
	To continue, click Next. If you would like to select a different folder, click Browse.							
	StProgram Files (x86) Flex API Browse							
	At least 293.2 MB of free disk space is required.							
	< Back Next > Cancel							

Figure 2 - choose folder location

虔	Setup - Flex API 🛛 🗕 🗆 🗙
	Ready to Install Setup is now ready to begin installing Flex API on your computer.
	Click Install to continue with the installation, or click Back if you want to review or change any settings.
	Destination location: C:Program Files (x86)/Flex API Start Nerw folder: NPower DNA
	<
	< Back Install Cancel

Figure 4 - confirmation

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.

9		Service	s			×
File Action View	v Help					
🗢 🄿 📅 🖾 (Q 🗟 🛛 📷 🕨 🔳 🕪					
🔍 Services (Local)	Name	Description	Status	Startup Type	Log On As	-
	🔍 DNA Service Agent	Allows DNAFusio	Running	Automatic	Local Syste	
	S DNADrvr32		Running	Manual	oo\jbrown	
	端 dnaFusion Flex	dnaFusion Flex	Running	Manual	oo\jbrown	
	🔍 dnaFusion Update	Push update serve	Running	Automatic	Local Syste	
	Client 🔍	The DNS Client se	Running	Automatic (T	Network S	
	🔍 Encrypting File System (EFS)	Provides the core		Manual (Trig	Local Syste	
	Extensible Authentication P	The Extensible Au		Manual	Local Syste	
	🔍 Family Safety	This service is a st		Manual	Local Service	
	🔍 Fax	Enables you to se		Manual	Network S	
	Service Service	Protects user files		Manual (Trig	Local Syste	
	Section Discovery Provide	The FDPHOST ser	Running	Manual	Local Service	
	Second Se	Publishes this co		Manual	Local Service	
	Google Update Service (gup	Keeps your Googl		Automatic (D	Local Syste	
	Google Update Service (gup	Keeps your Googl		Manual	Local Syste	
	Group Policy Client	The service is resp	Running	Automatic (T	Local Syste	
	🔍 Health Key and Certificate	Provides X.509 cer		Manual	Local Syste	
	G HomeGroup Listener	Makes local comp		Manual	Local Syste	
	Group Provider	Performs network		Manual (Trig	Local Service	
	🔍 🧠 Human Interface Device Ser	Activates and mai	Running	Manual (Trig	Local Syste	
	🔍 Hyper-V Data Exchange Ser	Provides a mecha		Manual (Trig	Local Syste	
	Guest Service Inter	Provides an interf		Manual (Trig	Local Syste	
	🔍 Hyper-V Guest Shutdown S	Provides a mecha		Manual (Trig	Local Syste	
	Hyper-V Heartbeat Service	Monitors the state		Manual (Trig	Local Syste	~
	Extended Standard					



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.



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 9 – Certificates

Import Certificate	
Import certificate Import a previously backed up certificate or install a certificate sent to you by another user or certification authority (CA).	
Certificate file (.pfx): Browse Password:	
ОК Сапсе	

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.

Create a Self-Signed Certificate X					
Certificate information When using a self-signed certificate, there is no chain of trust. The certificate has signed itself.					
X.500 distinguished name:	cn=oo-jeremy.oo.local				
Friendly name:	FlexAPI				
Key size (bits):	2048 👻				
Valid from:	1/9/2014 🗄				
Valid to:	1/10/2024				
	OK Cancel				

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 15 – Site Binding Dialog

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.

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



Figure 15 – Site Binding Dialog

Change the port to 8o.

Press the Save Changes button in the site bindings dialog.

Press the Save Changes button in the main Flex API.

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.

	License Inform	ation	System Inform	nation	
ervices lost used methods lost active clients	Licensed To License Type License ID System ID	Dell Latitude E6350 Demo Jeremy-00069 6D409049-E8B4-4F66-B306-8F7623A6DDEE	Host Name	oo-jeremy.oo.local	
	Online license upd	ates are enabled.	IP Addresses		
	Licensed For ADSync Badging Casi Clients DVRExacq DVRExacq DVRExacq DVRExacq Elex Flex FlexMobile SubControllers AllowRDP WebUsers	True 50 0 50 50 1 1 1 True 100 50 True 50	IPv6 IPv6 IPv6 IPv4 IPv4 IPv4	fe80::7cd7:b21f:4338;ea30%3 fe80::48fe7:C5b:2416:511e%54 fe80::8cb7:56dere8c8:c92b%53 10.0.31.27 192.168.6.1 192.168.15.1	
	Demo Informat	tion			
	Expires Last Checked Offline Duration	01/10/2014 14			

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.

Carrier 奈 2:07 PM 📼						
Cancel Settings Save						
Flex API oo-jeremy.oo.local						
Ignore bad certificates OFF						
Any changes made to the URL will force you to be logged out of the current session.						
Startup view Welcome						
Page size 25						
Amount of items returned during hardware and personnel searches.						
Smart Inspect						
Send to support						
Clear log files						

Figure 17 using SSL

Carrier 奈	2:07 PM	
Cancel	Settings	Save
Flex API	http://oo-jeren	ny.oo.local
Ignore ba	d certificates	ON
Any char you to	iges made to the l be logged out of session.	JRL will force the current
Startup vie	W	Welcome
Page size		25
Amou hardw	unt of items return are and personne	ed during I searches.
Smart In	spect	
	Send to suppo	ort
	Clear log files	3

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.

察 🔹 🍞 🔏 🧐 4:05 PM	°C 66° C 🧐 🕸 🗍 🖇 🛜 🖊	64) 4:07 PM
Ľ	< 🐢 Settings	법
s	FLEX API SETTINGS	
	Flex API http://oo-jeremy.oo.local	
DFF	SSL Certificates Ignore bad certificates.	ON
	GENERAL SETTINGS	
diately after logging	Startup View The view you will see immediately after in.	logging
nardware	Page Size The number of items returned during he and personnel searches.	ardware
	MANAGE CACHE	
	Reload Cache	
che from	Clear all cached data and rebuild the ca the server.	che from
	SMART INSPECT	
	Email App Logs	
to	Package the debug logs and email them support.	n to
	Figure 18 not using SSL	