### Blue Prism Mainframe Guide IBM iAccess with HostExplorer

**Document Revision 1.0** 



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### IBM iAccess with HostExplorer Emulator

iAccess software is used in conjunction with another emulator. In this case we will use the OpenText HostExplorer emulator to connect via iAccess to a running mainframe session.

The HostExplorer software was formerly known as "IBM Hummingbird" but was acquired by Open Text SA. iAccess is based on the custom DLL file "PCSHLL32.DLL" which is a HLLAPI standard.

### **Pre-Requisites**

The following product versions are recommended versions, rather than specific requirements.

- Recommended minimum Blue Prism versions: v4.2.59, or v5.0.11
- IBM iAccess Client Solutions v1.1.5.1
  - <u>NOTE</u>: If using IBM Personal Communications iService Access for Windows v6 then use the method described in the document "How to configure the IBM PComm Mainframe Emulator" instead of this document.
- OpenText HostExplorer v15.00

O About		×
for Business	IBM i Access Client Solutions (32-bit) Version: 1.1.5.1 Build id: 6131 March 23, 2016 8:58:58 AM GMT java.version: 1.8.0_71 java.vendor: Oracle Corporation java.home: C:\Program Files (x86)\Java\jre1.8.0_71 Copyright(c) IBM Corporation 2012, 2015 All Rights Reserved	(fil)
	ОК	
OPEN Hos	техт™ stExplorer™	

HostExplorer for x64

Version: 15.0.0.185

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### iAccess installation

iAccess is installed using the installer program found in the Windows Application folder:

C S S S S S S S S S S S S S S S S S S S	ess_v1r1   Windows_Application	on
Organize 👻 Include i	n library 👻 Share with 👻	New folder
Favorites E Desktop Downloads E Recent Places	Name Name install_acs_32 Name Na	
词 Libraries 😑		

Choose whether you need the 32-bit or 64-bit installer depending on your operating system.

During the installation you will be prompted to choose whether to install each of the components in turn. The only necessary component for Blue Prism is the **3270 Terminal** component.

Once installed place a shortcut to the correct launch icon from the **Start\_Programs** folder onto the desktop:

•	IBMiAccess	v1r1 > Start_Programs > Windows_x86-64
-	🖬 Open	Share with 🔻 New folder
orites sktop wnloads cent Plac	s ces	Name acslaunch_win-64

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### iAccess Configuration

Launch the iAccess Client Solutions interface and click on the 'System Configurations' to reveal a configuration screen:

IBM i Access Client Solutions					
IBM i Access Client Solutions (1) IBM.					
File Edit Actions Tools Help					
Welcome	System Configura ^				
System: localhost 🗸	create and manage : configurations for yc systems. Use this ta				
Management     System Configurations	create the system configuration for eac system you plan to u manage. <b>System</b> <b>Configurations</b> su				
	● creating n system				

Create a new System Configuration:

🙂 System	Configurations			×
System	Edit Selected S	ystem	<b>X</b>	
localhos	General Conne	ction Console		
	System name:	localhost		
	Description:	Blue Prism Mainframe		
	Use SSL for	connection		
	Verify Conne	ection		
				_
New				
	OK	Cancel	2	
		Carce		

Set the IP Address to be your localhost's IP - usually 127.0.0.1:

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General	Connection	Console		
Passv	ord Prompting	3		
$\bigcirc$	Use shared cr	edentials		
۲	Use default us	ser name to	prompt once for each system	
	Default us	ser name:		
0	Prompt for use	er name and	password every time	
O Use kerberos authentication; do not prompt				
Perfo	mance			
IP a	ddress lookup	frequency:	Never - Specify IP address 👻	
IP a	dress:		127.0.0.1	

Use the 'Verify Connection' button to ensure that the Telnet Service can be connected to:

Verifying connection to system localhost
Status
Verifying connection to central server serviceFailed: MSGSOCK007 - Could not connect. (Connection)
X Verifying connection to command serviceFailed: MSGSOCK007 - Could not connect. (Connection
Verifying connection to database serviceFailed: MSGSOCKUU/ - Could not connect. (Connection
Verifying connection to file service Failed: MSGSOCK007 - Could not connect. (Connection refus
X Verifying connection to print serviceFailed: MSGSOCK007 - Could not connect. (Connection ref.)
Kverifying connection to record-level access serviceFailed: MSGSOCK007 - Could not connect. (
X Verifying connection to signon serviceFailed: MSGSOCK007 - Could not connect. (Connection re
Verifying connection to Telnet serviceSuccess!
Done!
4 III >
OK Cancel (2)



### **OpenText HostExplorer Installation**

The software is available from this link:

http://connectivity.opentext.com/products/terminal-emulation.aspx

#### **Desktop Icon**

Start the HostExplorer software from the desktop icon for Connection Central.



#### **Folder Location**

The location of the saved session file (.HEP) can vary. Sometimes the files are stored in a central location, other times they are stored in a user's specific AppData location.



#### Hummingbird HostExplorer Session Set Up

First you need to amend the Terminal settings to have a Session Short Name: Edit -> Options -> Terminal -> API -> **Short Session Name** 



#### You then need to set up the Session A.

Session Profile - Session1	
Categories:	3270 Graphics Character Set API
Connection Security Cerminal Character Set Character Set Character Set Color Color Color Fonts Color Fonts Color Fonts Color Fonts Color Fonts Color Fonts File Transfer FTP Session Window Color Forts Color Colo	Session short name:
	OK Cancel Help

#### **Commercial in Confidence**



#### **DLL File Location**

• Locate the ehlapi32.DLL file

🌀 🗇 📲 ト Computer ト Windows (C:) ト Program Files ト Hummingbird ト Connectivity ト 14.00 ト HostExplorer ト					
Organize 👻 Include in library 👻 Share w	ith 👻 New folder				
🕌 expenses 🏾 🔦	Name	Date modified	Туре	Size	
IPG Operating Model My Scane	퉬 Assemblies	01/29/2016 09:23	File folder		
	鷆 Ext	01/29/2016 09:22	File folder		
Project Stuff - (G Drive)	퉬 Fonts	01/29/2016 09:22	File folder		
🍰 Settlement and Safekeeping - Data Anal	퉬 PrintServices	01/29/2016 09:22	File folder		
Je Settlements	퉬 XTable	01/29/2016 09:22	File folder		
Iravel	🧾 connect.bmp	09/02/2009 20:17	Bitmap image	37 KB	
je Export	🗟 ehlapi32.dll	07/25/2012 13:57	Application extens	60 KB	
tikensies.	🚳 ehllap32.dll	07/25/2012 13:55	Application extens	369 KB	
	🚳 filenamematcher.dll	06/12/2012 17:08	Application extens	107 KB	
Documents           Music	he5250ft.deu.nls	06/12/2012 16:58	NLS File	198 KB	
	he5250ft.eng.nls	06/12/2012 16:58	NLS File	196 KB	
Pictures	he5250ft.esp.nls	06/12/2012 16:59	NLS File	199 KB	
Mideo?	🕞 he5250ft.exe	07/05/2012 11:47	Application	563 KB	

#### Add DLL location to the PATH environment variable •

Right click Computer -> Properties then click the Advanced System Settings

System Properties					
Computer Name Hardware Advanced System Protection Remote					00
You must be logged on as an Administrator to make most of these changes.	mmingbird 🕨 Connectivity 🕨 14.00	Environment Variables		Search HostE	plorer
Performance Visual effects, processor scheduling, memory usage, and virtual memory		User variables for XBBKMQF			
Settings	Control Panel 🕨	Variable Value		Search Control Po	inel 🔎
User Profiles	Control Panel Home	TEMP %USERPRO	OFILE%\AppData\Local\Temp OFILE%\AppData\Local\Temp		0
Settings.	<ul> <li>Device Manager</li> <li>Remote settings</li> </ul>	New	Edit Delete		
Startup and Recovery System startup, system failure, and debugging information	<ul> <li>System protection</li> <li>Advanced system settings</li> </ul>	System variables			
Settings		OS Windows_N Path %HummPA	NT MTH14%;C:\ProgramData\Or		
Envirogment Variables		PATHEXT .COM;.EXE PROCESSOR_A x86	E;.BAT;.CMD;.VBS;.VBE;.JS;		
OK Cancel Apply	4	New	Edit Delete	GHz 3.20 GHz	
XBBKMQF\$ (\\whexpfseur05) (G:)     SherkOff (\\whexpfseur03) (H-)     SherkOff (\\whexpfseur03) (H-)			OK Cancel	this Display	
112 items	-	Computer name, domain, and Computer name:	l workgroup settings DE16CPI041D9RPT		😵 Change settings

- Within the System Properties window, click the Advanced tab (should already be there) then click Environment Variables button.
- o Within the System Variables section scroll down to the Path variable and click Edit
- Copy the Variable Value to Notepad, then add a semicolon; to the last variable and include the location of where the ehllapi DLL is stored for Hummingbird.

System Properties 23 Concuter Name Hardware Advanced System Protection Remote			
You must be logged on as an Administrator to make most of these changes. Performance Visual effects, processor scheduling, memory usage, and virtual memory Settings	mmingbird + Connectivity + 14.00	Environment Variables	Search HostExplorer
User Profiles Desktop settings related to your logon Startup and Recovery	Control Panel Home Control Panel Home Control Panel Home Remote settings System protection	Variable name: Path Variable value: mingbird(Connectivity)(14.00)(HostExplorer OK Cancel	
System startup, system failure, and debugging information Settings Envirogment Variables)	Advanced system settings	System variables Variable Value OS Windows_NT Path SkitumiPATH14%;C:(ProgramData)(V PATHEXT COM; EXE; BAT; CMD; VBS; VBE; JS; PROCESSOR_A x86	
OK Cancel Anniv		New Edit Delete	GHz 3.20 GHz

• **Copy/Paste** from Notepad into the Variable Value and **click OK**.

Ele Edit Fgrmat Wew Help Skuumpartid#S;c:\programbata\oracle\Java\javapath;c:\windows\system32;c:\windows;c:\windows\System32\Windows\System32\WindowsPowershell\v1.0\;c:\Program Files\Enterprise valit\EvClient;c:\windows\system32\windowsPowershell\v1.0\;c:\Program Files\LBM\SQLLEB\EUNCTON;c:\Program Files\LBM\SQLEB\EUNCTON;c:\Program F

### Blue Prism Configuration

The following instructions work only with an open session, i.e. the HostExplorer mainframe session must be running already before attempting to attach using the "Launch" button.

The file cannot be launched using this method, meaning that you need to have one Visual Business Object to launch the HostExplorer emulator, and another to connect to the running session.

• In Application Modeller specify the "**IBM iAccess (EHLLAPI)**" connector. This uses the EHLLAPI standard functionality to connect to an existing session file.

Application Modeller Wizard	? 🗙
Application Modeller	
Indicate what type of application you are using	
Mainframe (Generic EHLLAPI)	
Mainframe (IBM)	
Mainframe (Hummingbird HostExplorer)	
Mainframe (Hummingbird HostExplorer EHLLAPI)	
🔘 Mainframe (Attachmate)	
Mainframe (Attachmate Reflection)	
Mainframe (Passport)	
🔘 Mainframe (Rumba)	
Mainframe (Teemtalk)	
Mainframe (IBM PCom HLLAPI)	
Mainframe (IBM iAccess EHLLAPI)	
Mainframe (PowerTerm HLLAPI)	
Mainframe (NDL Conductor HLLAPI)	
Mainframe (RMD)	
< Back Next >	Cancel

- Session Identifier is A
- Application Manager mode must match the bitness of the HostExplorer software ("Embedded" is fine for 32-bit, but 64-bit <u>must</u> be set to "External, 64 bit mode")

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Application Modeller	
Define the elements of an application that will be used by Object Studio	
	Application Model belongs to this Object
Application Explorer	Application Name
<b>T</b> Filter the tree X	Mainframe - IBM iAccess
□- Mainframe - IBM iAccess L Element1	Session Identifier          A         Select the Application Manager mode         External, 64 bit mode         If necessary, enter any options specific to this target application, as directed by Blue Prism technical support.
Add Element Add Child	Launch Diagnostics Application Wizard
OK Cancel Apply	

• Click the Launch button in Application Modeller to attach to the running session.

#### Identifying elements in HostExplorer

Using the **Identify** button select the inner window using the Win32 Mode spying highlight, and the left-click to confirm the selection. This will produce the identification grid:

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