Abbydale Systems LLC.



HercNet

Program Information

E-mail: Support@abbydalesystems.com

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> Abbydale Systems LLC. 2925 Gulf Freeway South Suite B #229 LEAGUE CITY Texas USA 77573

ATTN: K.E.Ferguson Kevin@abbydalesystems.com

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CONTENTS

Disclaimer	1
Acknowledgements	1
1 Overview	1
1.1 Prerequisite Software	4
2 Installation Procedure	5
2.1 Download HercNet	5
2.2 Installing HercNet	5
3 Using HercNet	9
4 Example of HercNet Execution	2
5 How To Use Hercnet Output	4
7 Summary of Amendments	5
Obtaining Support	5

Page 3/16

1 Overview

HERCNET is a VB.Net Windows[™] application that will take information from the host PC and, along with user defined variables, and construct the definitions required to enable a Hercules[™] guest to communicate with the outside world.

The program was written by Bowstore Ltd on a third-party machine running a legal z/OS system and with their complete knowledge and approval.

Abbydale Systems LLC have tested the program and packaged it for distribution, but we do not have the resources to thoroughly test the output produced on any guest system above MVS 3.8J but it should work with higher levels of MVS and z/OS as the underlying systems use pretty much the same definitions.

We do not endorse running any software without legal licenses!

1.1 Prerequisite Software

For a connection to be made between the host (Hercules) and the guest operating systems, you will need to download and install **CTCI-WIN**[™] from **Software Development Laboratories**. <u>www.softdevlabs.com/ctci-win.html</u>. We also recommend (although it isn't a requirement) using **HercGu**[™] i from the same company.

Obviously, you will also need to have the **Hercules** emulator installed.

The Hercules emulator is available from the Hercules home page at www.hercules-390.eu.

The MVS 3.8j Tur(n)key 4- System is available from <u>wotho.ethz.ch/tk4-/</u>. This is a legitimate and free copy of MVS 3.8

You will also need a 3270 emulator. We recommend using **wc3270** which is available from <u>x3270.miraheze.org/wiki/Wc3270</u>.

As **HercNet** is a VB.Net application you will need to have the .Net Framework installed. The .Net Framework is available from Microsoft[™] (for free) VB.Net is available from the Dot Net Download page at <u>dotnet.microsoft.com/en-us/download/dotnet-framework</u>. We recommend getting the 4.8 version or higher.

2 Installation Procedure

2.1 Download HercNet

HercNet can be downloaded from the Abbydale Systems website at the following address:

www.abbydalesystems.com/WinCode.php.

Save the downloaded file to your desired location.

2.2 Installing HercNet

•

Navigate to where you saved the downloaded file and then double click on the setup file (HercNet.exe).

Date modified	Туре	Size
4/27/2023 9:39 PM	Application	1,583 KB
	Date modified 4/27/2023 9:39 PM	Date modifiedType4/27/2023 9:39 PMApplication

Figure 1: The Installation File

Once the file has been clicked, **HercNet** will begin to be installed. The first screen that will be display is:

-76		×
		FR
		(10m)
	Browse	•))
Next	c	ancel
	Next	Browse

Figure 2: Path Selection

From this screen you can choose the location that the code will be installed into. The size requirement is displayed at the bottom of the screen.

Once you have selected the desired path, click on the "Next" button.

If the selected folder doesn't exist, it will be created by the installation process.

If the folder already exists, then the installation process will ask if you still want to continue to install **HercNet** into that path. The screen will look like the following:

Folder E	xists	\times
?	The folder:	
	C:\Users\Server\AppData\Local\Programs\HercNet	
	already exists. Would you like to install to that folder anyway?	
	Yes No	

Figure 3: Directory Usage Confirmation

Click on "Yes" to continue with the installation. If you click on "No" the "Folder Selection" panel will be redisplayed.

Once the path has been selected and "Yes" has been clicked, the installation process will display a panel showing the options you have selected to use. The display will look like:



Figure 4: Option Confirmation Screen

Once you are happy with the options selected, click on the "Install" button and **HercNet** will be installed. This should only take a few seconds.

Once the installation is complete the following will be displayed:



Figure 5: Installation Complete Display

Notice that you can have the installation process launch HercNet.

The installation will place an icon on your desktop (if requested) that looks like:



Figure 6: The HercNet Icon

See the following section for how to use HercNet

3 Using HercNet

When you start **HercNet** it will gather IP information from the computer that you are running it on and then display the following screen:

Genter Desired Guest IP Address	(0		×
Current Computer IP In	nformati	on	
Running on Server			
IP Address of Server NIC is : 192.168.1.	.222		
IP Address of Router is : 192.168.1.1			
Desired guest IP address : 1 Guest Operating System DOMAINORIG (i.e WWW.yourname I Open output file when file Generate	92.168.1. Identifier IN .COM) nished?	U www.	
<u>owstore</u> Contact Support	Copyright :	V <mark>ersion</mark> Kevin Fe	2.2.0.5 erguson

Figure 7: The HercNet Display

The fields are as follows:

- 1. Name of the computer that **HercNet** is running on (in this example the computer is named "Server").
- 2. The IP address of the Network Interface Card.
- 3. The IP address of the actual router that the computer is connected to.

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- 4. This is where you specify the IP address to be used by the guest running under Hercules (i.e. MVS). This should be specified as a number between 1 and 254. It should be unique within the connected devices.
- 5. This is a 4-character operating system identifier. It should be 4 alphanumeric characters. (i.e., CPU1, ADCD, MVS!)
- 6. This should be domain name that you want to give to your guest system. It should be in internet address format (i.e., <u>www.cpu2.com</u>)
- 7. The display output check box will give you the option of opening the output file when the definitions have been build. The default is to show that output.
- 8. The "Generate" button will cause the program to create the required definition using the value you have provided.
- 9. The "Stop" button will terminate the program.
- 10. The "Contact Support" button will automatically open your default email program to allow you to contact our support staff.

When you have filled out the form, press the "Generate" button. You will be prompted for both the folder and file name for the output. The default file name is **HercNet.txt**. The folder and file selection panel looks like the following:



Figure 8: File and Folder Selection Panel

4 Example of HercNet Execution

This section shows an actual execution of **HercNet**. It will show the output file created from the input provided:

When the main panel was displayed, we entered the following values:

Guest IP address: 222

Guest Operating System Identifier: MVS1

DOMAINORIGIN: www.abs.com

Enter Desired Guest IP Address	0 7 -		\times
Current Computer IP In	formati	on	
Running on Server			
IP Address of Server NIC is : 192.168.1.2	222		
IP Address of Router is : 192.168.1.1			
Desired guest IP address : 19 Guest Operating System I DOMAINORIGI (i.e WWW.yourname.) Open output file when fin	2.168.1. dentifier N COM) hished?	222 MVS1 www.abs.] com[
		Exit	
owstore Contact Support	Copyright	Version : Kevin Fe	2.2.0.5 erguson

Figure 9 : Demonstration Screen

Once the "Generate" button is clicked the definitions will be generated and the following output file will be displayed (Highlighting and bolding has been added only in this document):

The following should be placed in the Hercules Config file Network Adapter Guest IP 0E20.4 LCS -n 192.168.1.222 -m 02-AA-BB-CC-DD-EE 192.168.1.222 <----- End of Hercules Config Data ------The following should be placed in the PROFILE member of the TCP PARMS dataset on the guest system ; DEVICE DEFINITION DEVICE LCSA2 LCS E22 AUTORESTART LINK LCS2 ETHERNET 0 LCSA2 HOME 192.168.1.222 LCS2 ; IP routing information for the host. All static IP routes should : ; be added here. BEGINRoutes ROUTE 192.168.0.0 255.255.0.0 = LCS2 MTU 1492 ROUTE DEFAULT 192.168.1.1 LCS2 MTU 1492 ENDRoutes ; START LCSA2 <----- End of TCP PROFILE Requirements ------<mark>-></mark> <----- The following should be placed in TCP Data --------> HOSTNAME MVS1 DOMAINORIGIN WWW.ABS.COM *** Make sure that your domain name in in the table of TCPIP HOSTS *** *** The domain name should be coded as : WWW.ABS.COM NSINTERADDR 192.168.254.254 <----- End of TCP Data Requirements ------> Created by Server On 4/28/2023 at 10:19:39 PM

5 How To Use Hercnet Output

The output generated by **HercNet** comprises of definitions that should be used in three places.

- The Hercules configuration file. (Highlighted in green above)
- The TCPIP PROFILE definitions on the guest operating system. (Highlighted in blue above)
- The TCPIP HOST definitions on the guest operating system. (Highlighted in purple above)

WARNING

The output file should not be copied in its entirety into any of those places.

The output indicates which definitions should be copied to where.

Do **<u>NOT</u>** copy comment lines anywhere! (Highlighted in yellow above).

You will need to change the LCS (LAN Channel Station) device address if you need to use something other than the 0E20-0E24 address range.

7 Summary of Amendments

Date	Version	Comment
28 th April 2022	2.2.0.5	Release version.
25 th June 2023	2.2.0.6	Added DEFAULT to the TCPIP route.
		Removed the brackets from the START LCSA2 command.

Obtaining Support

Support for, comments about and suggestions for enhancements for this product can be obtained from our website :

www.abbydalesystems.com

or by emailing us at

support@abbydalesystems.com

In order to assist us in filtering support emails please specify in the heading of the email the name of the product that you require support on.

Spam will not be tolerated at this email address.

Where source code is provided for the product, support will be on a 'best efforts' basis. Where the user site has modified the source code, support may entail requesting copies of that sites source code and may result in support being withdrawn if this is not provided.

Abbydale Systems LLC. reserves the right to any code modifications that may have been undertaken at the user site.

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