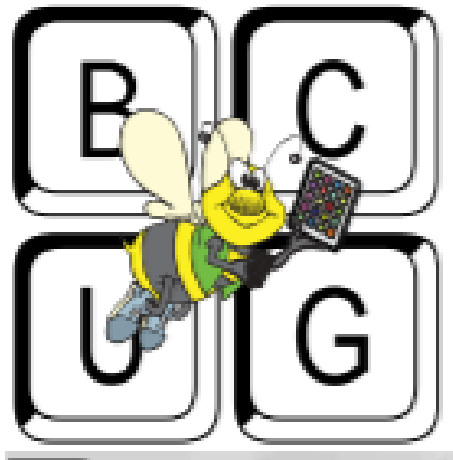


04-DESKTOP HYPER-V: NESTING VIRTUAL MACHINES

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Web location for this
presentation:

<http://aztcs.org>

Click on “Meeting Notes”
or contact me by email at
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SUMMARY

"Hyper-V" does a great job of letting you nest a virtual machine inside another virtual machine so that you can limit the risks that you take with the registry of your real physical host computer.

TOPICS

- DEMONSTRATION OF A NESTED VIRTUAL MACHINE
- DETAIL INSTRUCTIONS FOR NESTING A VIRTUAL MACHINE

DEMONSTRATION OF A NESTED VIRTUAL MACHINE:

"Host" computer running Windows 10 Pro

Hyper-V program

**Virtual Machine running Windows 10
Enterprise Evaluation**

Hyper-V program (nested)

**Virtual Machine running
"Windows 10 Enterprise
Evaluation (nested)"**

The screenshot shows a nested virtual machine environment. The outermost window is titled "Windows 10 Ent Eval 64b nested enable Gen1 20171016 on DESKTOP-32LSCSJ - Virtual Machine Connection". Inside, a second window titled "Nested Windows 10 Enterprise Evaluation 64bit 2017-10-22 on DESKTOP-SLUAO8R - Virtual Machine Connection" displays a web browser window. The browser window is titled "Brookdale Computer U: X" and shows the website "bcug.com/".

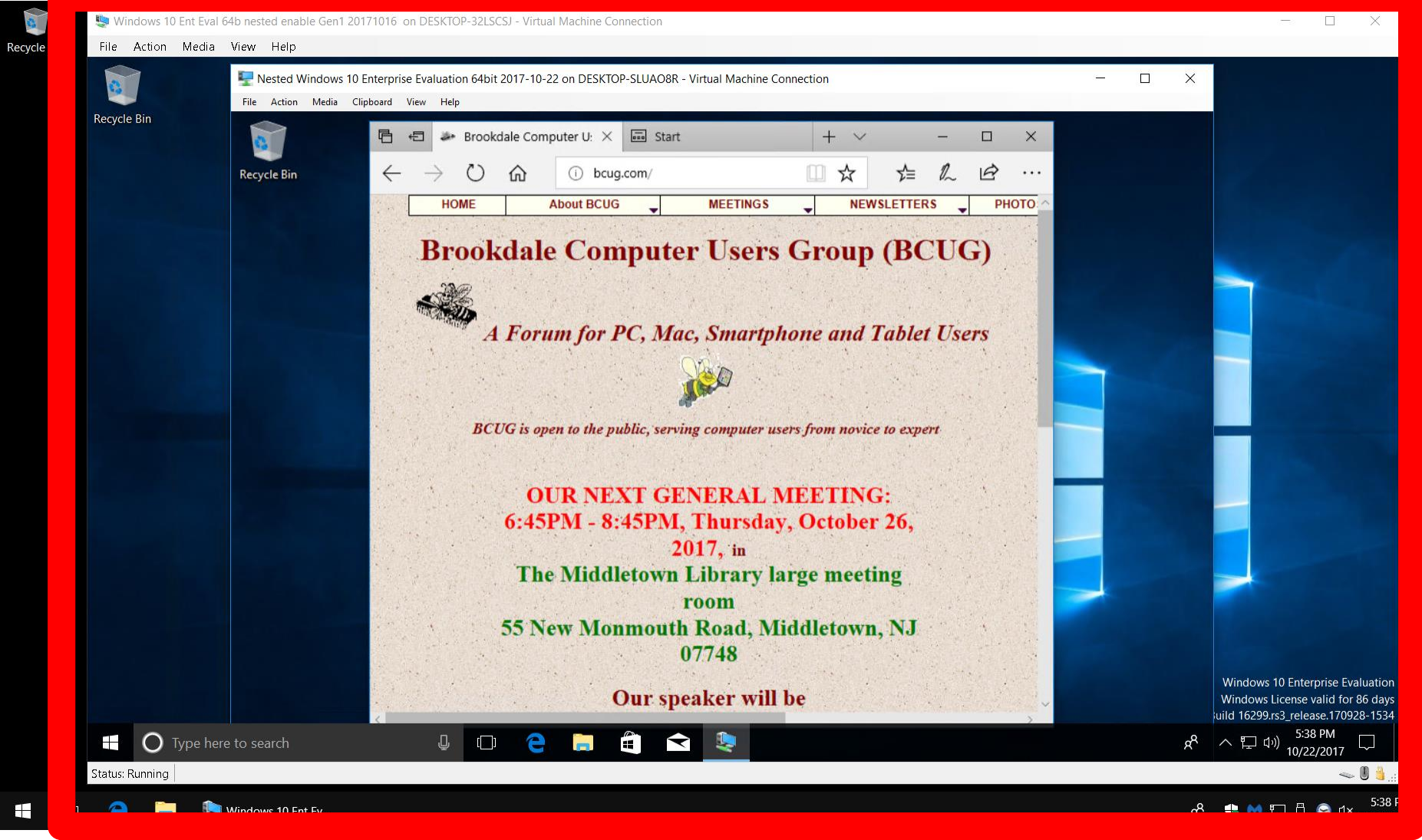
The website content includes a navigation menu with "HOME", "About BCUG", "MEETINGS", "NEWSLETTERS", and "PHOTO". The main heading is "Brookdale Computer Users Group (BCUG)" with a bee logo. Below it is the tagline "A Forum for PC, Mac, Smartphone and Tablet Users" and another bee logo. The text states "BCUG is open to the public, serving computer users from novice to expert".

The announcement for the next meeting is:

OUR NEXT GENERAL MEETING:
6:45PM - 8:45PM, Thursday, October 26,
2017, in
The Middletown Library large meeting
room
55 New Monmouth Road, Middletown, NJ
07748

At the bottom, it says "Our speaker will be".

The Windows taskbar at the bottom shows the search bar, taskbar icons for Edge, File Explorer, Mail, and a folder. The system tray shows the date and time as "5:38 PM 10/22/2017". A watermark in the bottom right corner reads "Windows 10 Enterprise Evaluation Windows License valid for 86 days build 16299.rs3_release.170928-1534".



Windows 10 Ent Eval 64b nested enable Gen1 20171016 on DESKTOP-32LSCSJ - Virtual Machine Connection

Nested Windows 10 Enterprise Evaluation 64bit 2017-10-22 on DESKTOP-SLUAO8R - Virtual Machine Connection


Brookdale Computer U: Start

bcug.com/

HOME About BCUG MEETINGS NEWSLETTERS PHOTO

Brookdale Computer Users Group (BCUG)

A Forum for PC, Mac, Smartphone and Tablet Users



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Windows 10 Enterprise Evaluation
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id 16299.rs3_release.170928-1534

5:38 PM
10/22/2017

Status: Running

Windows 10 Ent Ev...

5:38 PM
10/22/2017

The screenshot displays a Windows 10 desktop environment. A primary window titled "Windows 10 Ent Eval 64b nested enable Gen1 20171016 on DESKTOP-32LSCSJ - Virtual Machine Connection" is open. Within this window, a secondary window titled "Nested Windows 10 Enterprise Evaluation 64bit 2017-10-22 on DESKTOP-SLUAO8R - Virtual Machine Connection" is visible. This nested window shows a web browser with the URL "bcug.com/" and a website for the Brookdale Computer Users Group (BCUG). The website content includes a navigation menu with "HOME", "About BCUG", "MEETINGS", "NEWSLETTERS", and "PHOTO". The main heading is "Brookdale Computer Users Group (BCUG)" with a bee logo. Below it is the tagline "A Forum for PC, Mac, Smartphone and Tablet Users" and another bee logo. The text states "BCUG is open to the public, serving computer users from novice to expert". The announcement for the next meeting is: "OUR NEXT GENERAL MEETING: 6:45PM - 8:45PM, Thursday, October 26, 2017, in The Middletown Library large meeting room 55 New Monmouth Road, Middletown, NJ 07748". The text "Our speaker will be" is partially visible at the bottom. The desktop background is the standard Windows 10 blue wallpaper. The taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray on the right shows the time as 5:38 PM on 10/22/2017 and a notification icon.

Windows 10 Ent Eval 64b nested enable Gen1 20171016 on DESKTOP-32LSCSJ - Virtual Machine Connection

File Action Media View Help

Nested Windows 10 Enterprise Evaluation 64bit 2017-10-22 on DESKTOP-SLUAO8R - Virtual Machine Connection


File Action Media

Brookdale Computer U: X Start


bcug.com/

HOME About BCUG MEETINGS NEWSLETTERS PHOTO

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5:38 PM
10/22/2017

Status: Running

Type here to search

Windows 10 Ent Ev...

5:38 PM
10/22/2017

REASONS FOR RUNNING A NESTED VIRTUAL MACHINE

Reason 1:

A nested "virtual machine" saves wear and tear on the Registry of a Windows host computer for when you need to test or demonstrate virtual machines often.

Reason 2:

A nested "virtual machine" lets you make screenshots and demonstrations of various deeply-buried configuration screens that you otherwise could not make

DETAILED STEPS FOR MAKING A NESTED VIRTUAL MACHINE:

Step 1:

Start up the host computer.

Step 2: Install "Client Hyper-V" into it.

Step 3: Start up the "Hyper-V Manager"

Step 4: Create a new virtual machine.

Step 5:

Install "Windows 10 Pro 64-bit",
"Windows 10 Education 64-bit" or
"Windows 10 Enterprise 64-bit" in
the new virtual machine.

This virtual machine will be used
as the "outer" virtual machine

Step 6:

Shut down the "outer" virtual machine so that it is in the "Off" state

Step 7:

Use the right mouse button to click on the Start Button of host computer.

Step 8: Use the left mouse button to start up a "Windows Powershell (Admin)" window in the host computer

Step 9:

Type in

```
Set-VMProcessor -VMName
```

```
<VMName> -
```

```
ExposeVirtualizationExtensions
```

```
$true
```

Step 10:

Press the Enter key of the

keyboard

Step 11:

Close the "Windows Powershell (Admin)" window (that is running in the host computer)

Step 12:

Reboot the host computer.

Step 13:

Start up the "Hyper-V Manager" in the host computer

Step 14:

Start up the "outer" virtual machine.

Step 15:

Install "Hyper-V" into the "outer" virtual machine just like you would install it into a regular physical host computer

Step 16:

Install a nested "virtual machine" into the nested copy of "Hyper-V" running inside the "outer" virtual machine

Step 16:

Install an operating system into
the nested "virtual machine"

See

<https://docs.microsoft.com/en-us/virtualization/hyper-v-on-windows/user-guide/nested-virtualization>