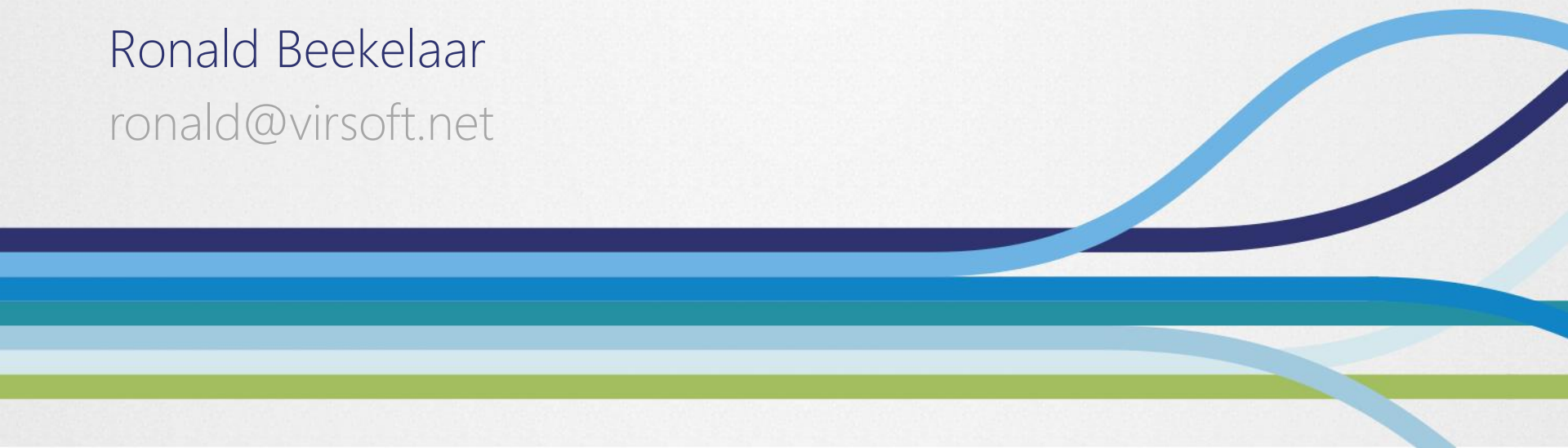


Nested Hyper-v

How to use nested virtualization

Ronald Beekelaar

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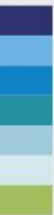
ronald@virsoft.net

Virsoft Solutions

- Hoster: training / demo environments
- See www.virsoft.net

MVP Hyper-V

- Since 14 years



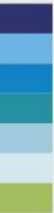


Session Objectives

Help you get starting with nested Hyper-V

Examples

- Build labs that require Hyper-V
- Study Hyper-V: live-migration, etc





Nested Hyper-V

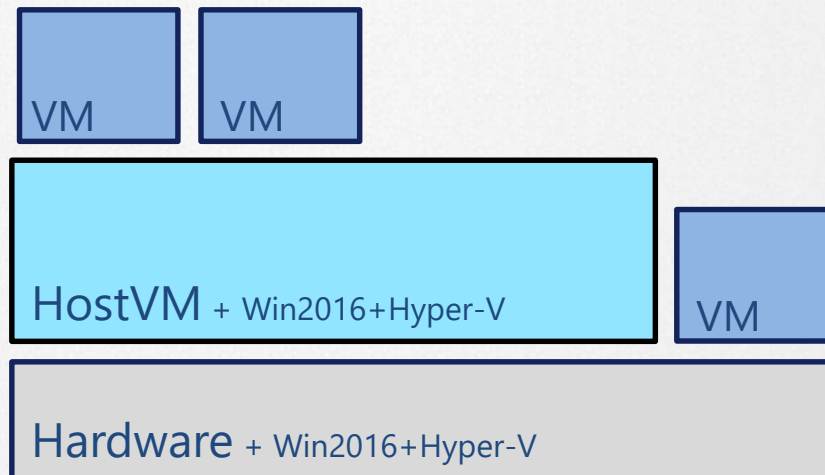
Why did Microsoft enable this?

- Hyper-V Containers

What OS is needed?

- Win 10 / Win2016

Concept





Requirements

- Same Windows build
- OS: Win10 or Win2016
- Intel processor VT-x and EPT technology

Config:

- `PS>Set-VMProcessor -ExposeVirtualizationExtensions`
- Disable dynamic memory
- Enable MAC spoofing
- Processor count > 1

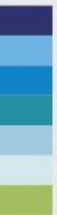


Limitations

HostVM

- No runtime memory resize
- No dynamic memory
- No 3rd-party virtualization

- ~~No Save state~~
- ~~No running checkpoints~~
- ~~No live-migration~~

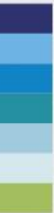




Networking

Two options

- Use external switch (2x)
 - Requires MAC address spoofing in hostVM
- Use NAT solution
 - See resource page on next slide

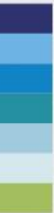




Resources

Nested virtualization:

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





Questions?

Or connect to ronald@virsoft.net

