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EUC Performance Analysis Tech Note



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Following

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 1 file attached



We updated the [EUC Performance Impact Analysis](#) tech note. In this tech note, we describe the impact that changes in an end-user computing environment, like changing from Windows 10 to Windows 11 or upgrading an Office version, might have on the performance and user density of an EUC environment. We also provide insights on the performance impacts of changing vCPU configurations per virtual machine (VM). We expect customer results to vary because the workload we used isn't the same as a real user workload. Our test results indicate the effects that these changes might have; changing the workload changes the outcomes.

We included the following performance test results:

- Impact of optimizing the golden image
- Windows 10 vs Windows 11
- Increasing vCPUs per virtual desktop
- Impact of enabling Credential Guard
- VDI vs RDSH
- Windows Server 2019 vs Windows Server 2022
- RDSH CPU configurations
- Microsoft Office Versions

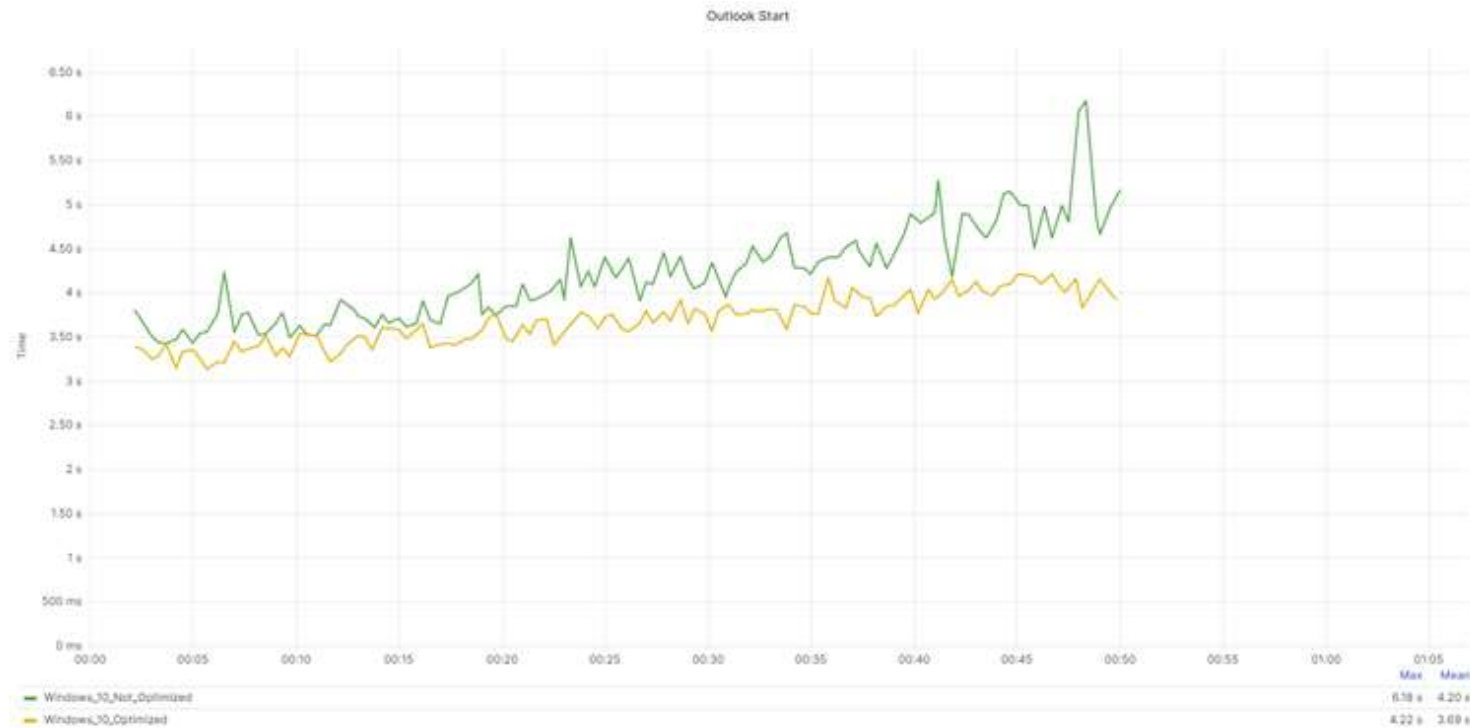
We used Login Enterprise to perform these tests. You can read about [Login Enterprise here](#).

Optimizations

The tech note not only describes how to optimize the golden image, but also what the impact is of optimizing the image. In the following graph, you can see the difference in CPU usage on the host:



The CPU load higher when the golden image is not optimized and the logon times and application performance is also slower. In the next graph you can see the difference in Outlook start times:

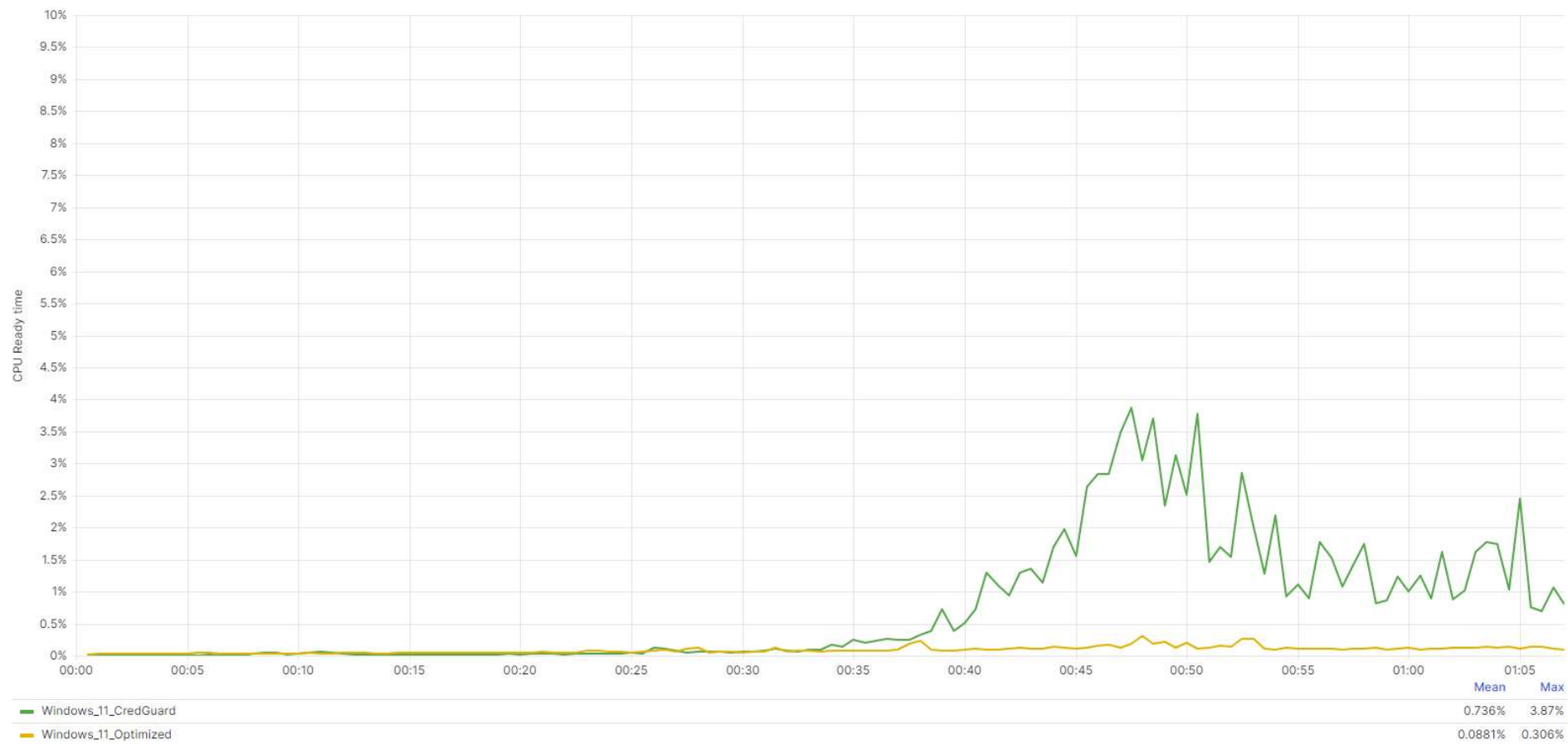


Credential Guard

Another comparison we made is the impact of enabling Microsoft Credential Guard on the virtual machines. At first, the host CPU usage seems lower with Credential guard enabled, but if we zoom in on the CPU ready time, you can see it's much higher with Credential Guard enabled. The login times and application performance is also much slower with credential guard enabled (up to 50% slower!).

CPU ready time:

Average CPU Ready time



Excel start time:



Microsoft Office Versions

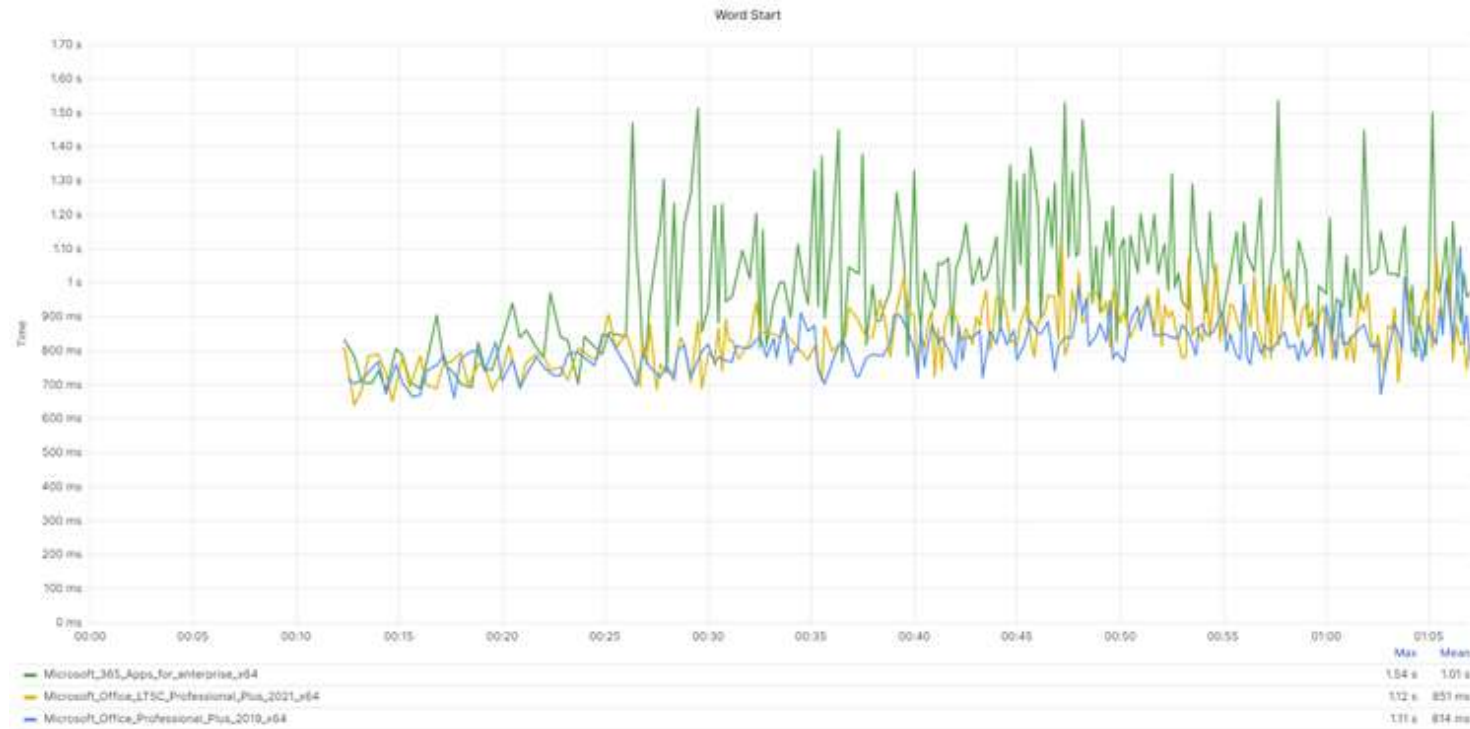
Another comparison from the tech note is the comparison between Office 2019, Office 2021 and Office 365.

The following graph shows the differences in host CPU usage between the three versions:



As you can see, the host CPU usage is higher when using Office 365.

The following graph shows the differences of starting Word:



As you can see, the application performance is slower when using Office 365 compared to older versions.

Tech Note

These are just a few examples from the tech note [EUC Performance Impact Analysis](#).

We also have a [powerpoint](#) with the results from the tech note.



EUC-Performance Impact-2023
PPTX - 11 MB

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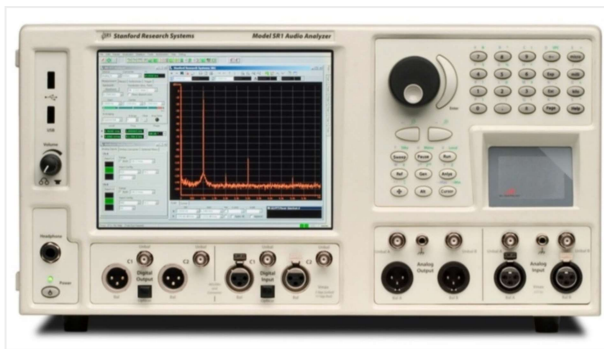


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