

Ubuntu VM Setup & Environment Preparation

Technical Assessment Report

Submitted by: Chi Kanu

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 by Chi Kanu

Introduction

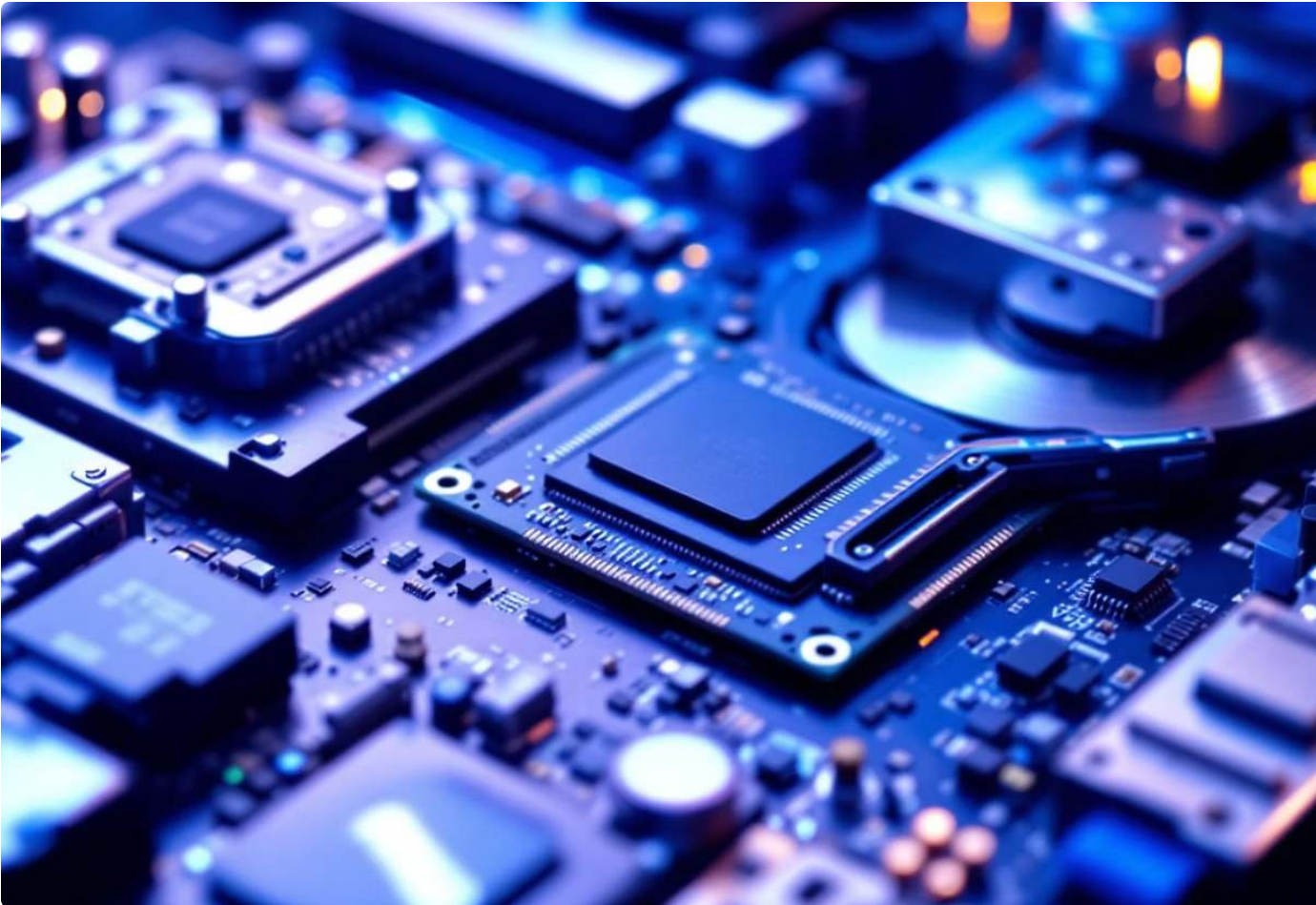
This technical assessment report details the steps taken to set up a virtualized environment and perform specific tasks, demonstrating proficiency in system administration and software usage.

Main Tasks:

- VMware Workstation installation
- Ubuntu Linux operating system installation
- Configuration of fixed resolution for the virtual machine
- Execution of verification commands
- Completion of a task using LibreOffice Calc

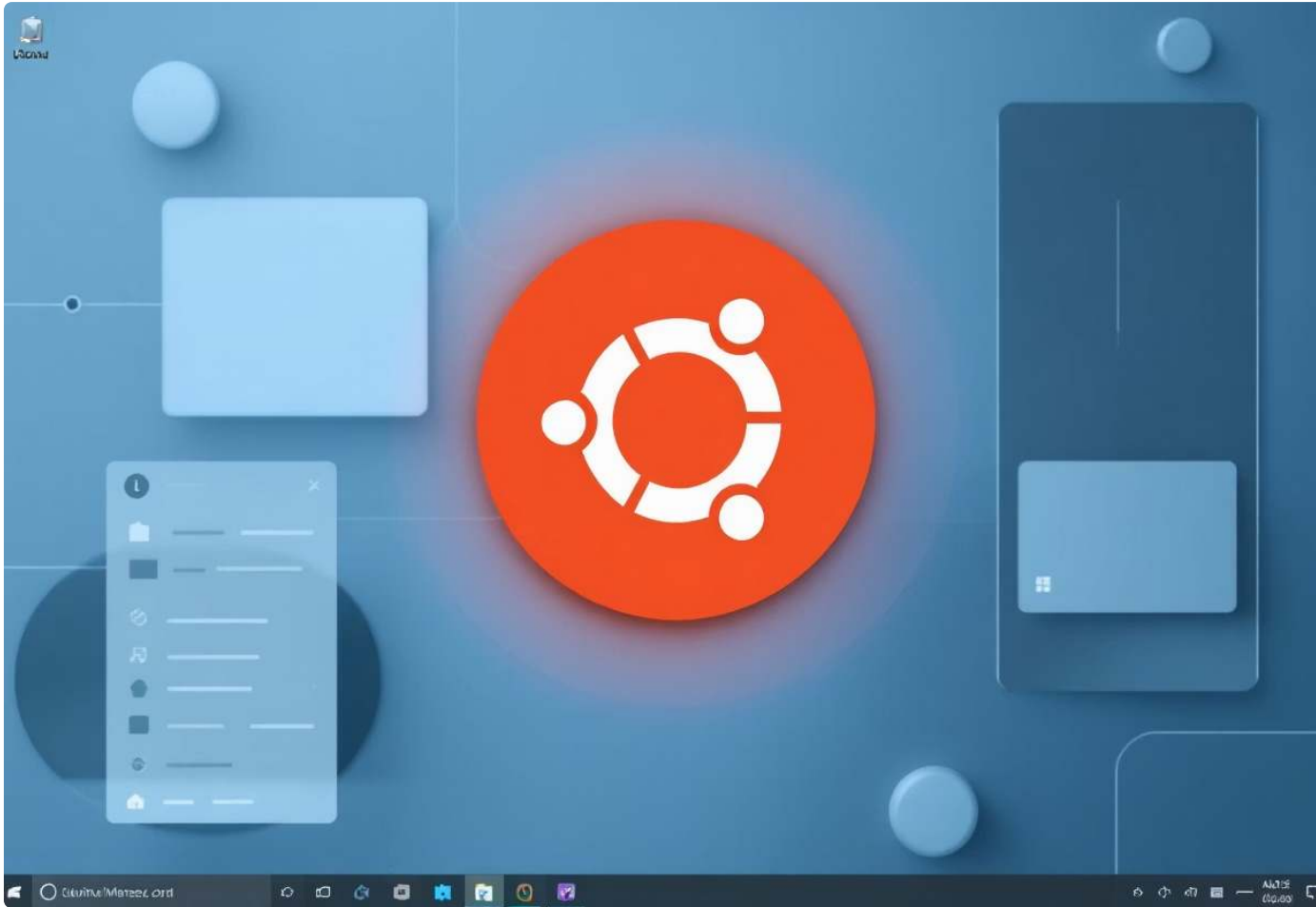
Host Hardware Verification

- 16GB RAM confirmed
- CPU model and virtualization support
- Disk availability
- Importance of meeting minimum specs
- Overview of verification steps



Ubuntu ISO Download

- Downloaded Ubuntu 22.04.5 LTS
- Source: official Ubuntu releases site



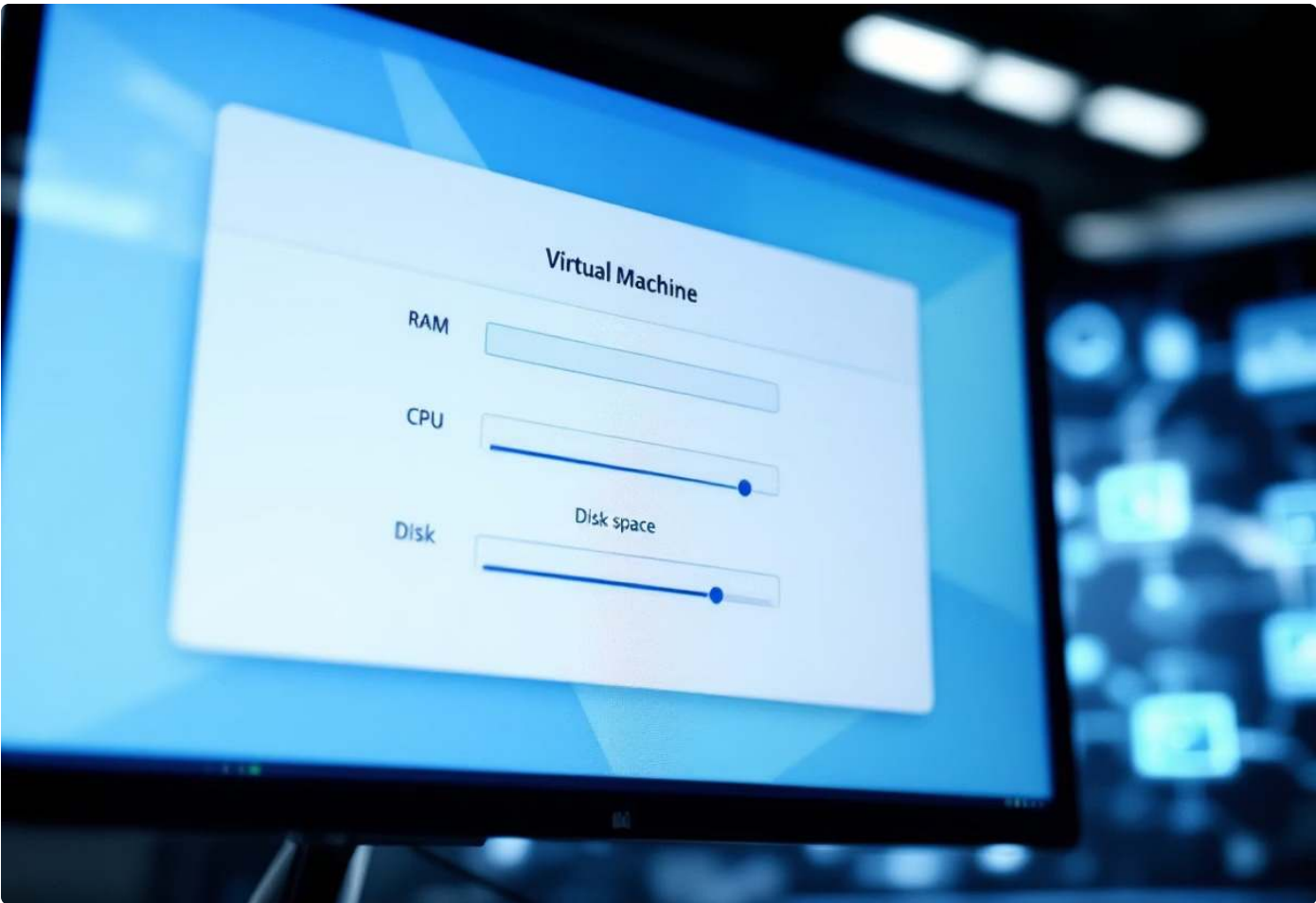
VM Creation

The virtual machine was configured according to the following specifications to ensure optimal performance:

Name Ubuntu 64-bit	RAM 8GB	CPU 2 cores
Disk 40GB	Graphics 3D acceleration enabled	

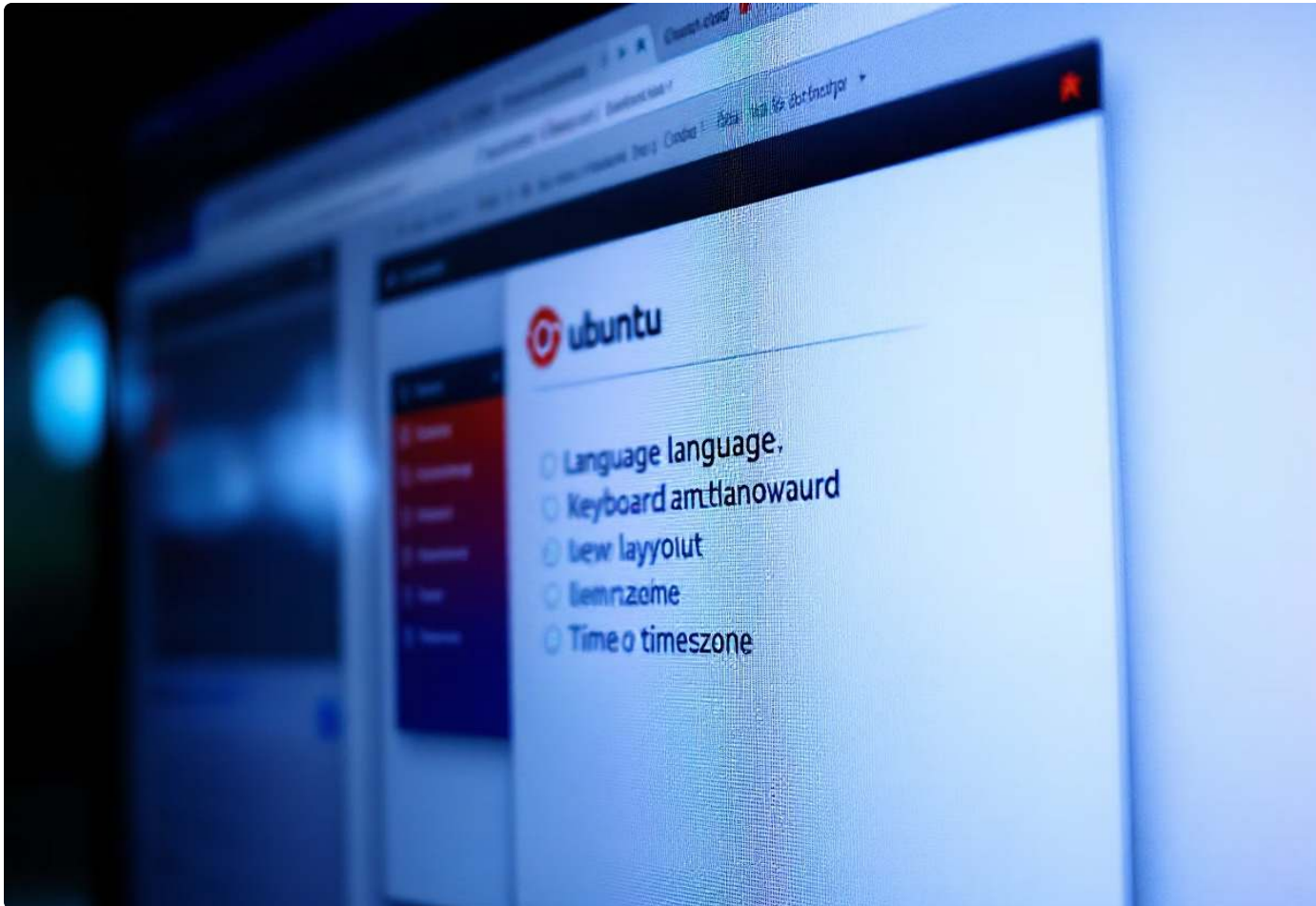
Summary of configuration flow

The virtual machine was configured with the specified resources to ensure optimal performance for the Ubuntu 64-bit operating system, including enabling 3D acceleration for graphics processing.



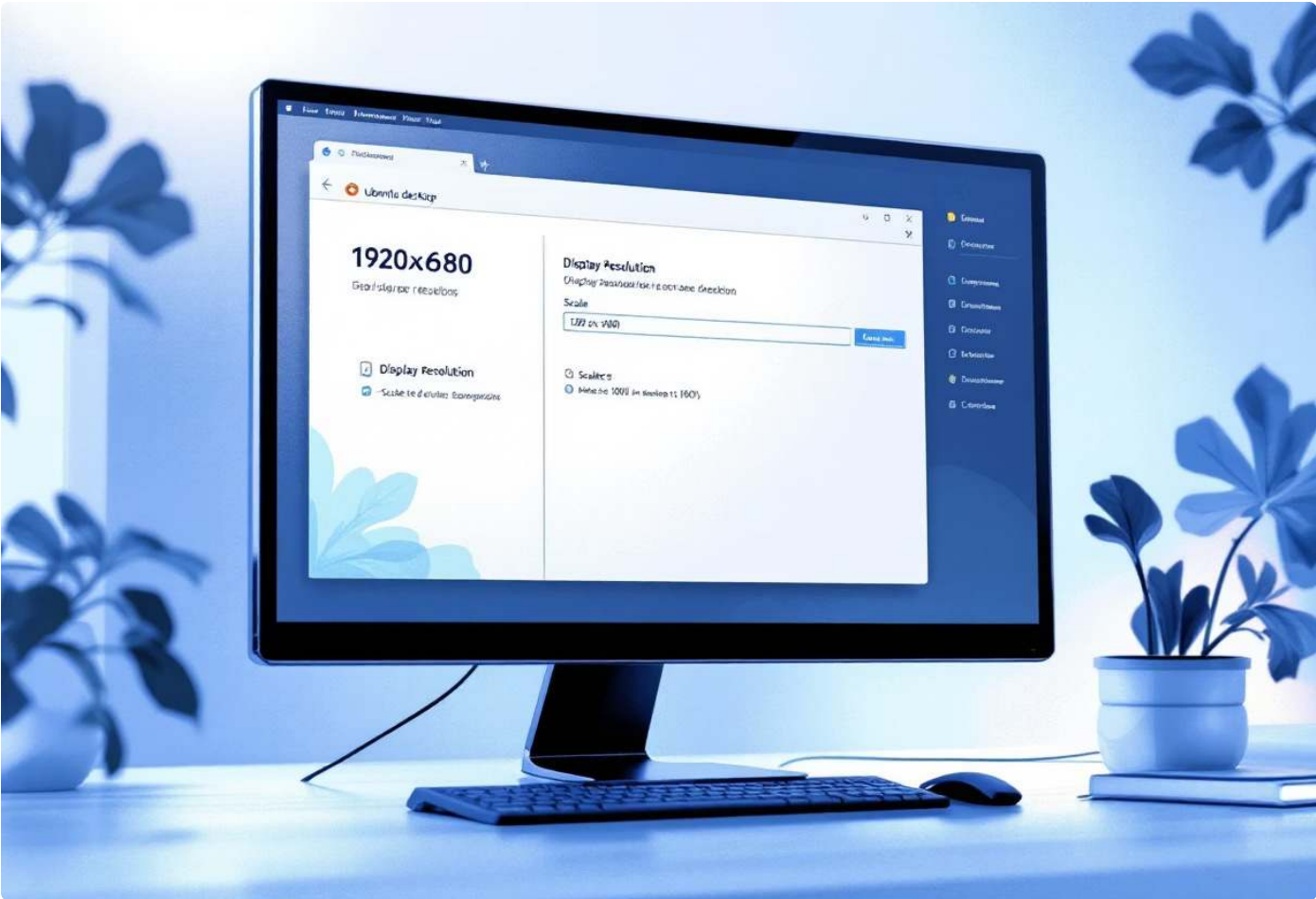
Ubuntu Installation

- Normal installation
- Language, keyboard, timezone
- Account setup
- First login to the desktop



Ubuntu Display Resolution Configuration

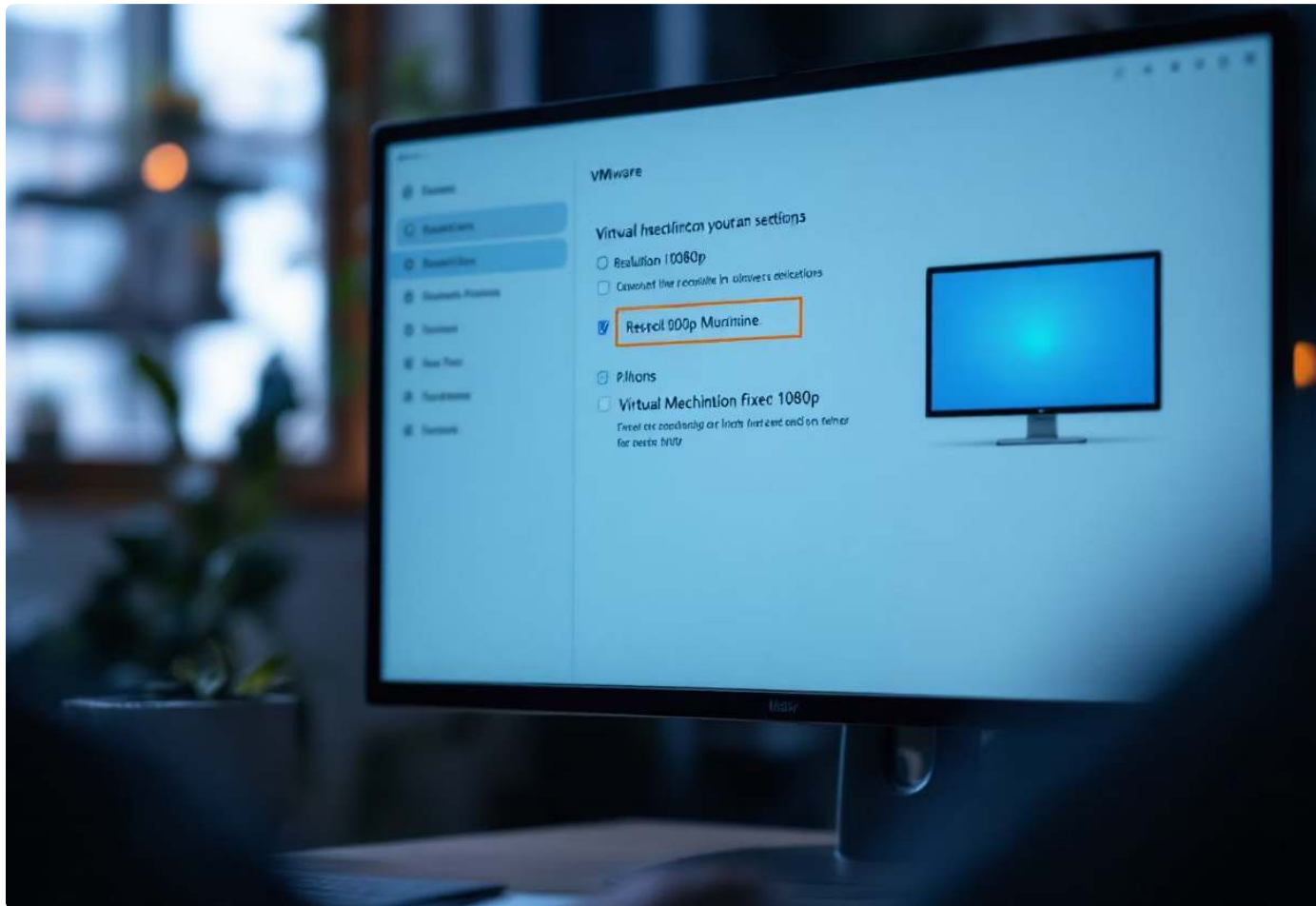
1	2	3
Resolution Set to 1920×1080 for optimal clarity and consistency.	Scaling Maintained at 100% to prevent UI distortions.	Consistency Ensuring a consistent UI is crucial for reliable automation scripts and visual validation.



VMware Resolution Locking

- Disabled autofit options
- Enabled custom monitor settings
- Ensured VM stays fixed at 1080p

Locking the resolution is critical for maintaining a stable and predictable environment, which is especially important for tasks requiring precise visual consistency or automated scripting.



System Verification

1

lsb_release -a

Verified the Ubuntu version, confirming 22.04.5 LTS.

2

```
uname -a
```

Identified the kernel version for system stability checks.

3

df -h

Confirmed disk usage and available space for operations.

4






```
echo $XDG_SESSION_TYPE
```

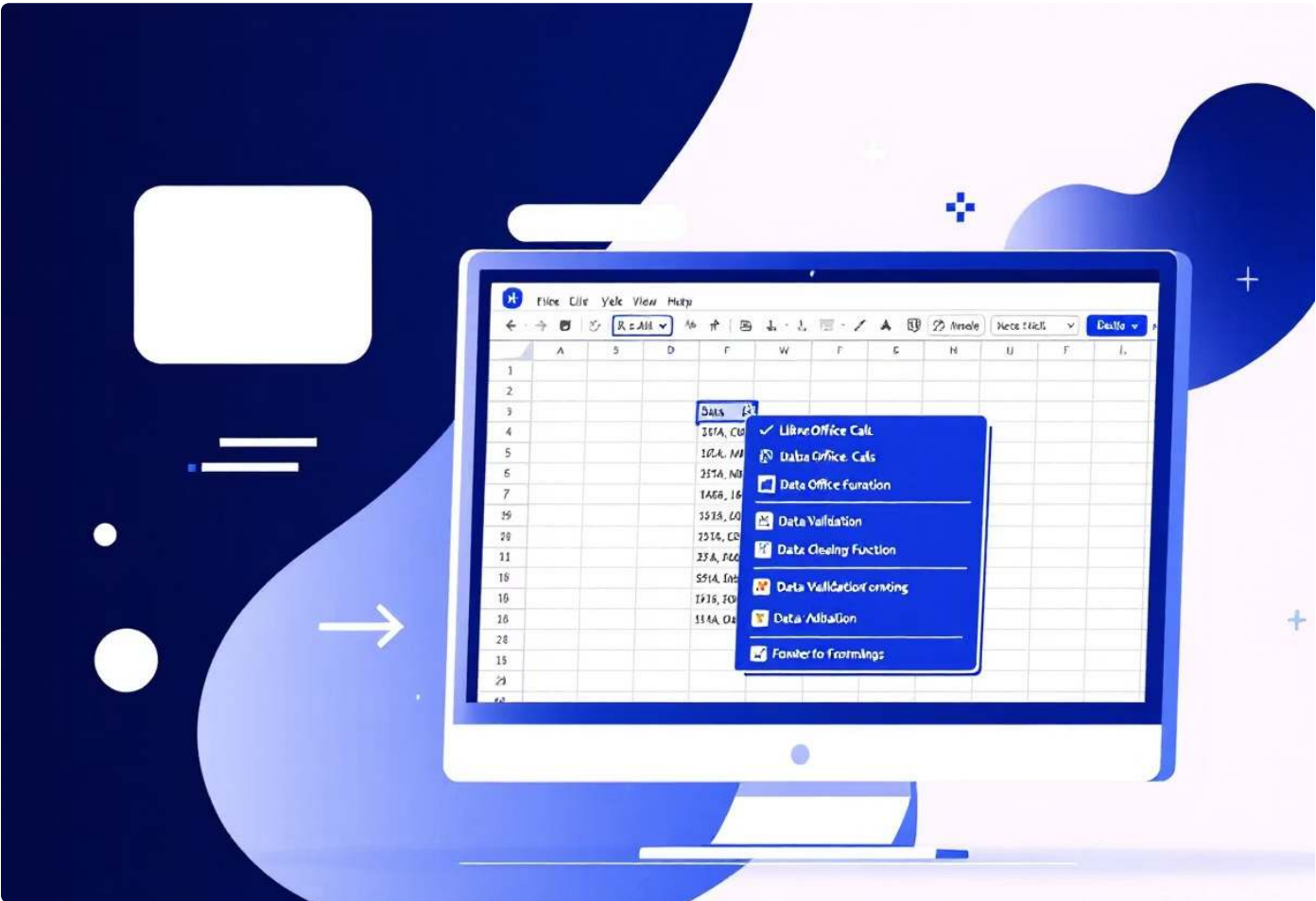
Checked for Wayland session to ensure proper display server.

These commands were executed to verify the core system components and configurations, ensuring the environment was set up correctly and functioning as expected after the Ubuntu installation.



LibreOffice Calc Assessment Task Process

-  Loaded messy CSV
-  Removed invalid email rows
-  Standardized phone numbers to (XXX) XXX-XXXX
-  Converted state abbreviations to full names
-  Saved cleaned file as orders_cleaned.csv



Troubleshooting & Issues Faced

- VMware resolution issues
- Phone number formatting irregularities
- Managing state abbreviation replacements



Time Spent

The following table outlines the estimated time allocated to each key task during the setup and assessment process:

Task	Time (hours)
VMware Setup	0.5
Ubuntu Installation	1.5
Resolution Configuration	0.5
System Verification	0.5
LibreOffice Task	0.5

The total estimated time for all tasks was approximately 3.5 hours, reflecting the detailed steps involved in setting up and verifying the virtualized environment.



Conclusion

This technical assessment successfully established a virtualized environment and demonstrated core system administration and data management capabilities.

All Requirements Met

The project successfully fulfilled all specified requirements, from environment setup to task execution.

Environment Ready for Automation

The prepared environment is now fully configured and stable, ready to support OSWorld automation workflows.

Assessment Completed Successfully

The entire assessment process was completed with precision, showcasing strong technical proficiency.