



IT INFRASTRUCTURE

Development for a Web Development Company

AGENDA

1. PROJECT OBJECTIVE
2. SERVERS
3. NETWORK DIAGRAM
4. TOOLS
5. CONCLUSION



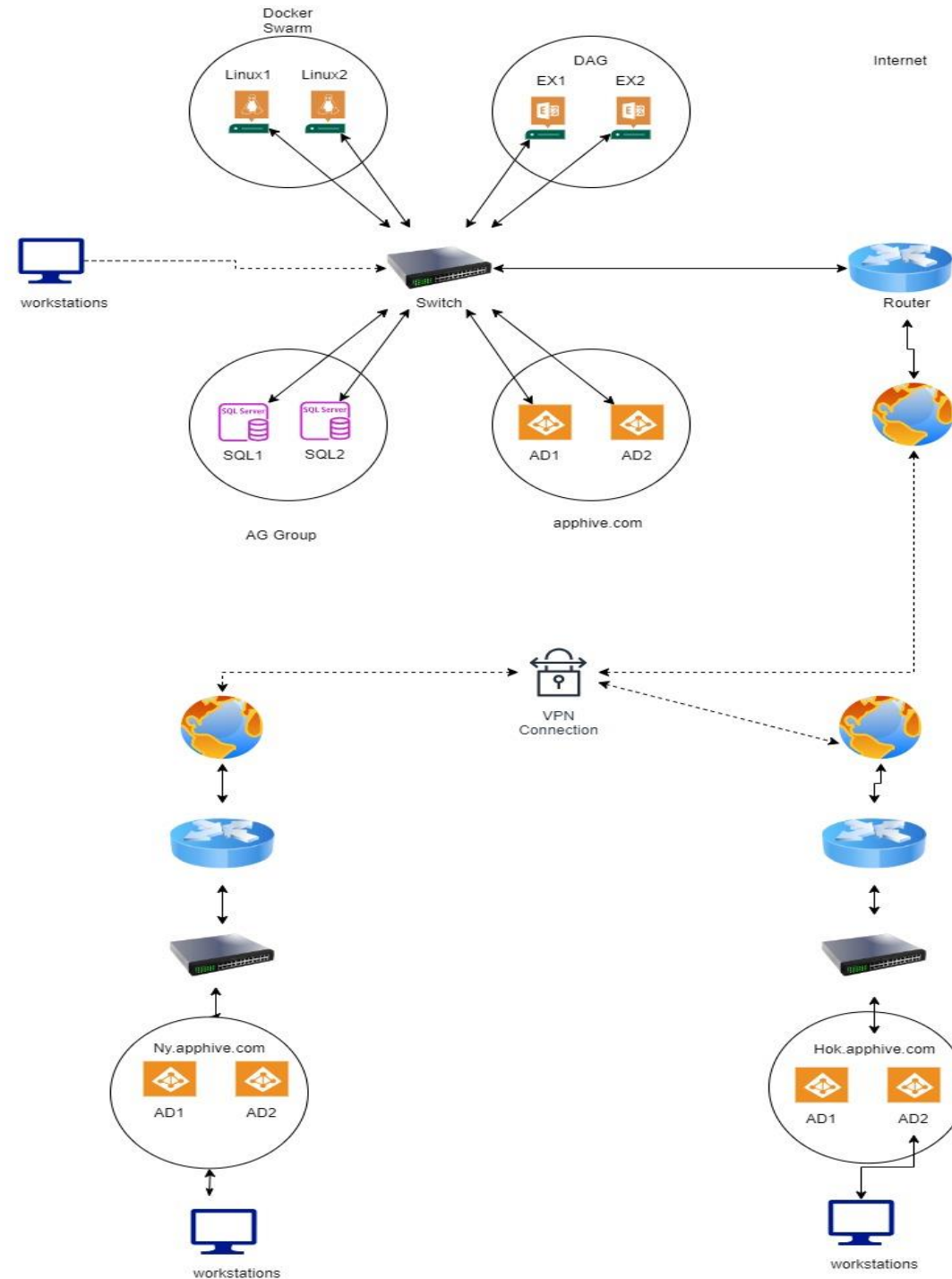
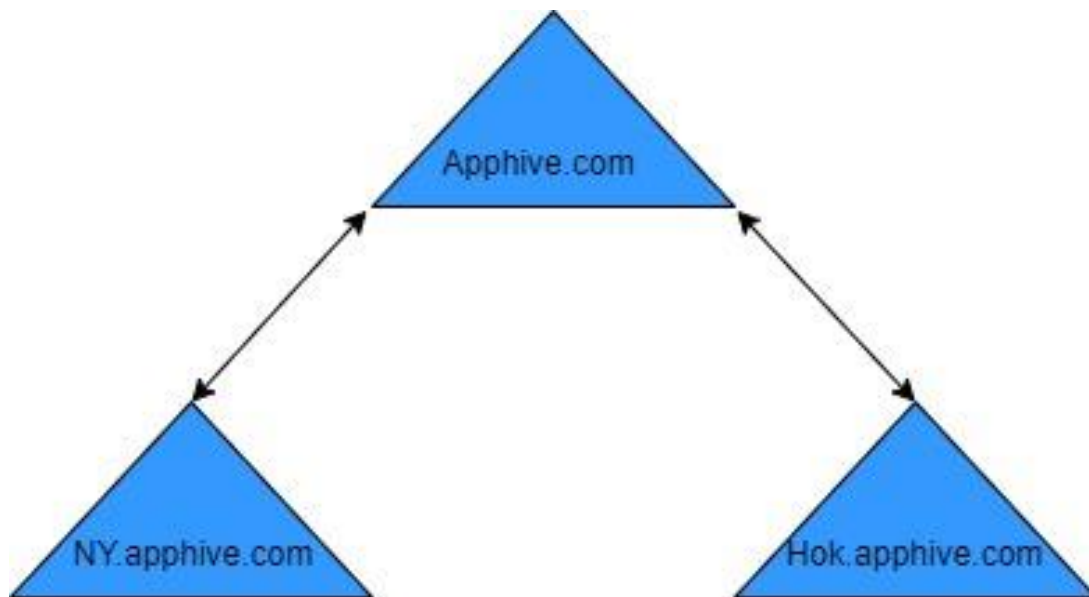
PROJECT OBJECTIVE

This project aims to develop an infrastructure for the web development company that is launching new offices in Hong Kong and New York. This includes developing and using computer models for web developers and office workers. The following sections of this document contain a detailed explanation of each step.



NETWORK DIAGRAM

- This is our network diagram. This diagram shows how the whole infrastructure is created.



SERVERS



Servers

- Exchange Server 2019
- SQL Server 2019
- Linux Server with Docker
- ADDS Server



Servers

- Intune Server with AD
- Windows Workstations
- Splunk Server
- ManageEngine Server

TOOLS

- In this project, we have supported our servers with various tools to perform different tasks. Our team members who have researched and handled these tools on their own manage these tools. The list of tools used is as follows:

1. ManageEngine Service Helpdesk
2. Docker Swarm
3. Portainer
4. Microsoft Intune
5. Splunk
6. Atera

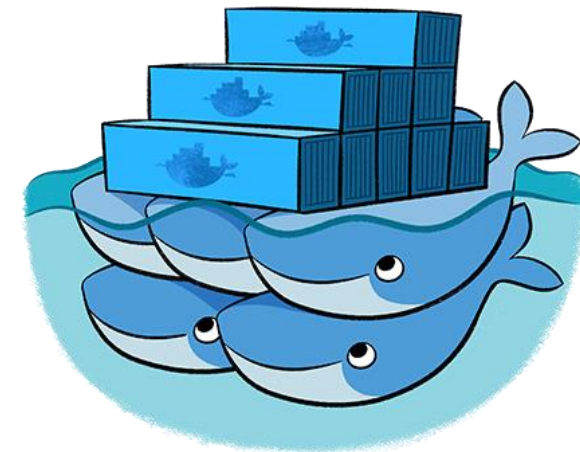
MANAGE ENGINE SERVICE HELPDESK

- Robust Features: Self-service portals Incident & problem management.
- Change management Reporting & analytics.
- Ease of Use: Intuitive User interface for IT staff & end users.
- Seamless Integration: Email platforms. Active Directory Monitoring Systems.
- Automation: Ticket routing & SLA management with escalations & approvals.
- Scalability: Suits small to large firms. It also handles high user & ticket volumes efficiently.



DOCKER SWARM

- Runs your containers across multiple machines.
- Highly available: If one machine fails, others keep containers running.
- Scalable: Easily add more machines to handle more containers.
- Networking built-in: Containers can talk to each other within the swarm.
- Manages services: Define and scale your applications as services
- .Simple updates: Update your applications without downtime.
- Efficient resource allocation: Ensures containers get the resources they need.



PORTAINER

- A lightweight management tool for Docker and Kubernetes.
- Web-based UI: Provides a user-friendly interface to manage containers.
- Container management: View, start, stop, restart, and delete containers.
- Image management: Search, pull, push, and manage Docker images.
- Volume management: Create, inspect, and manage volumes for container data.
- Network management: View and manage container networks.



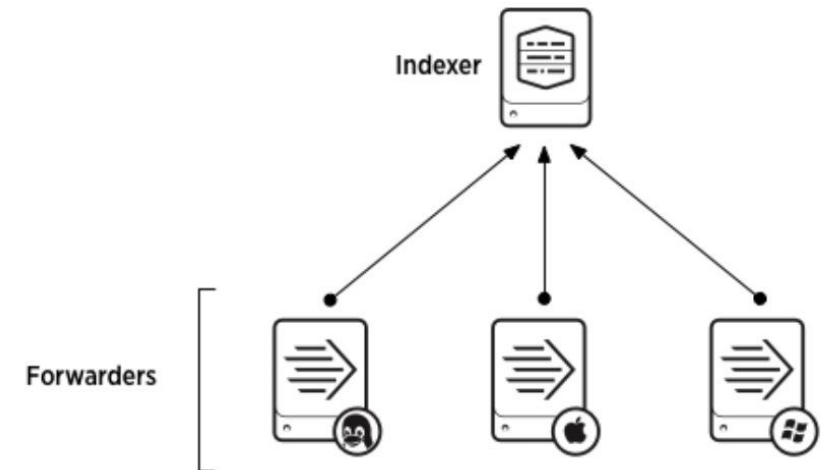
MICROSOFT INTUNE

- It can easily integrate with the current Microsoft environment.
- Support: It has got cross-platform support.
- Security: It supports a variety of security features.
- Endpoint management capabilities.
- For scalability & accessibility, it has a cloud-based architecture.
- A user-centric approach for identity & access control.



SPLUNK

- Splunk efficiently collects, indexes, and analyzes machine-generated data from multiple sources, providing a complete view of IT environments.
- Splunk's real-time capabilities trigger alerts for immediate issue identification and resolution, enhancing operational reliability and security.
- Splunk scales seamlessly to accommodate growing data volumes and adapts to various applications beyond IT and security, such as business analytics.
- As a powerful SIEM tool, Splunk ensures compliance, supports forensic investigations, and integrates with other security tools for enhanced threat management.
- Backed by a robust community and a marketplace full of apps, Splunk fosters innovation and collaborative problem-solving among users.



splunk>
a **CISCO** company

ATERA

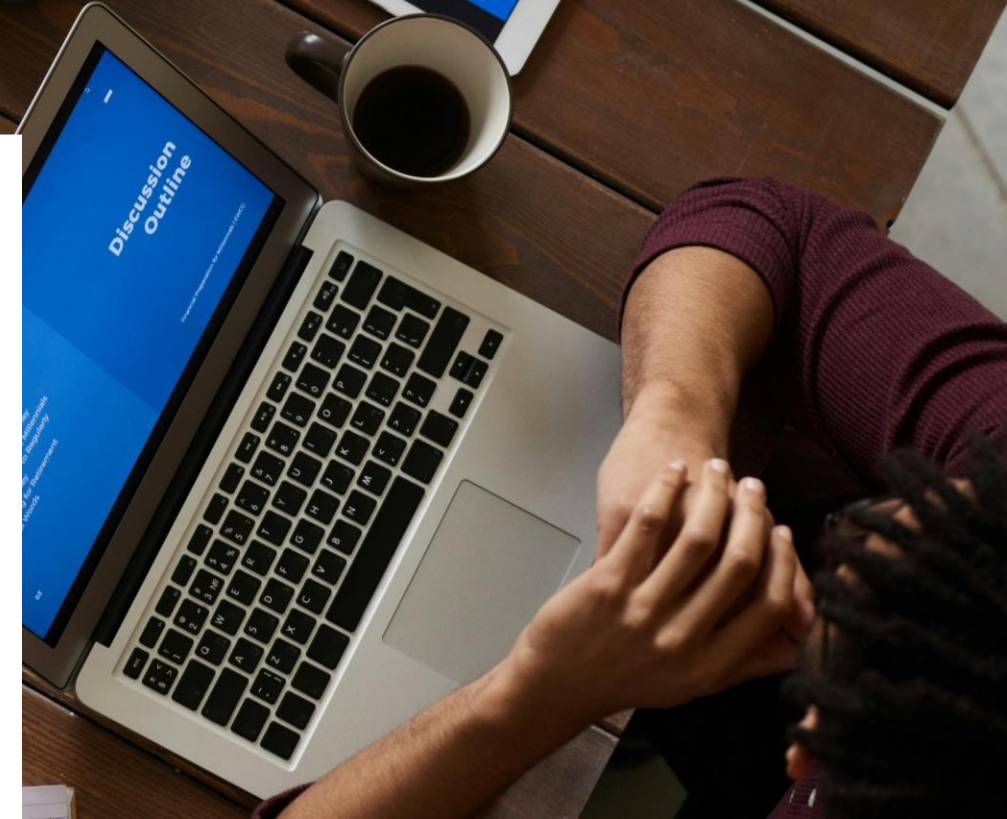
- Comprehensive, integrated tools and features suite for RMM, PSA, and remote access.
- Transparent and cost-effective pricing based on a per-technician, per-month model.
- Intuitive interface and user-friendly dashboard for real-time insights and proactive actions.
- Automation and scripting capabilities to streamline tasks and improve productivity.
- Seamless integration of ticketing and billing functionalities for improved workflow management.
- Scalability and customization options to accommodate growth and align with unique business needs.



CONCLUSION

In conclusion, the goal of developing an infrastructure for the web development company's new offices in Hong Kong and New York is crucial for enabling efficient operations and collaboration. By creating computer models tailored to the needs of web developers and office workers, the company can enhance productivity, streamline processes, and support growth in these locations. This initiative represents a strategic investment in technology to drive success and competitiveness in the digital landscape.





THANK YOU