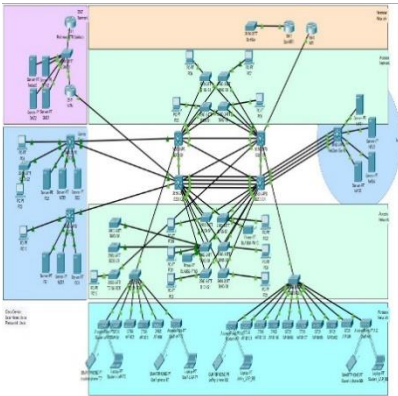


# IP Migration

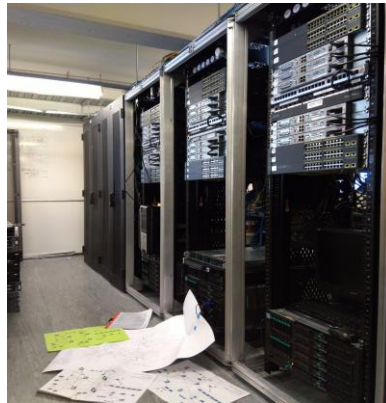
By: Achyut Ranjit, Pradeep Chandimal

Supervisor: Paul Bryant

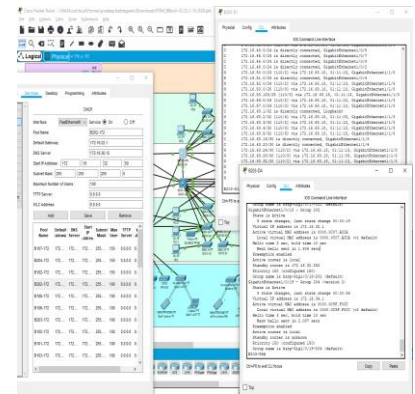
Client: Jeffry Echano



Simulate IP Migration on Packet Tracer



Requirement Gathering



Simulate Current Network

## INTRODUCTION

IP migration is actual client requirement, that simulate existing WelTec SoIT BBlock network and prove it end to end connectivity conducting various testing methodologies. Then simulate migration with best possible new ip address range followed by post-migration testing. Then project team has to produce comprehensive IP migration Plan based on the all the exercise.

WelTec grasped the magnitude of guideline and migration plan to follow their actual IP address migration on SoIT BBlock network. WelTec SoIT is in the process of selling existing IP range to international, because its uses public IP range.

## DEVELOPMENT

The methodology we selected for this project was hybrid white papers, which combination of two internet white papers' methodology. Therefore, these white paper's maturity models and the project environment may have more possibility of success rate on IP migration project than other standard project methodologies. Because the project environment is also a key factor of project success and that establishes a relationship in between methodology and project success. This maturity model has seven steps as [Cleanup][PB1], Documentation, Research, Pre-migration Testing, Execution, Post-migration Testing and Turnover.

In the Cleaup phase, team started by gathering the project requirements and followed by generate all the planning documents. While doing the requirement gathering team analyse and validate existing BBlock network infrastructure to update network diagram. Once the systems survey finished, project team

started simulating the current network on Cisco packet Tracer. Network engineers put their industry experience and academic knowledge to build the entire BBlock network with end to end communication. Then testing team conducted pre-migration test with more than 100 test cases, which was significant phase of this project. Team encountered configuration errors and managed to troubleshoot by producing root cause analysis report. [PB2]

During the simulation of new IP address migration, project team identified the IP migration procedure with best practises. This was the happening phase where team decided the migration should be done overnight with migration window or step by step without having network downtime. Post-migration testing phase confirmed the network works as before the migration. Which will eliminate users' support calls for IT support.

Finally, team prepare IP Migration Plan and [recommendation][PB3] documents align with entire exercises.

## CONCLUSION

The team was successfully able to meet all the client requirements and produce ultimate "IP Migration Plan with Recommendation" document as their actual network migration project guideline.

Migration is not a rare phenomenon in the enterprise network; therefore, this project gave opportunity to prepare for real industry experience. Project team invested significant amount of time for planning, system analysis and testing prior to simulate the migration. That was directly contributed to success of this project.