



**Partnership for International Research and Education
A Global Living Laboratory for Cyberinfrastructure Application Enablement**

Project Title: Researching Hands-on Educational Approach to IT Automation

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I. Research Overview and Outcome

Overview: Provide an hands-on and interactive approach to teaching IT Automation. In this case, taking an IT Automation solution like Kaseya and building an approach to teaching and bringing a mock test environment on Kaseya's many modules. If users can learn from a virtual mock environment, then they will be better prepared and trained on how to use the software in a real work environment.

Deploy Virtual Environment

With the help of a web scheduler, students will deploy their virtual environment. As they progress through each chapter, or module, their work is saved on the virtual environment for future access. Required files are put in the virtual environment to help the user with their hands-one exercise.

Scenario

Through the use of multiple virtual machines, a scenario is given to the user. The scenario will closely resemble a working network with a server and multiple workstations. The scenario is equipped to handle many different situations within or outside a network domain. After the scenario is given, then a problem arises.

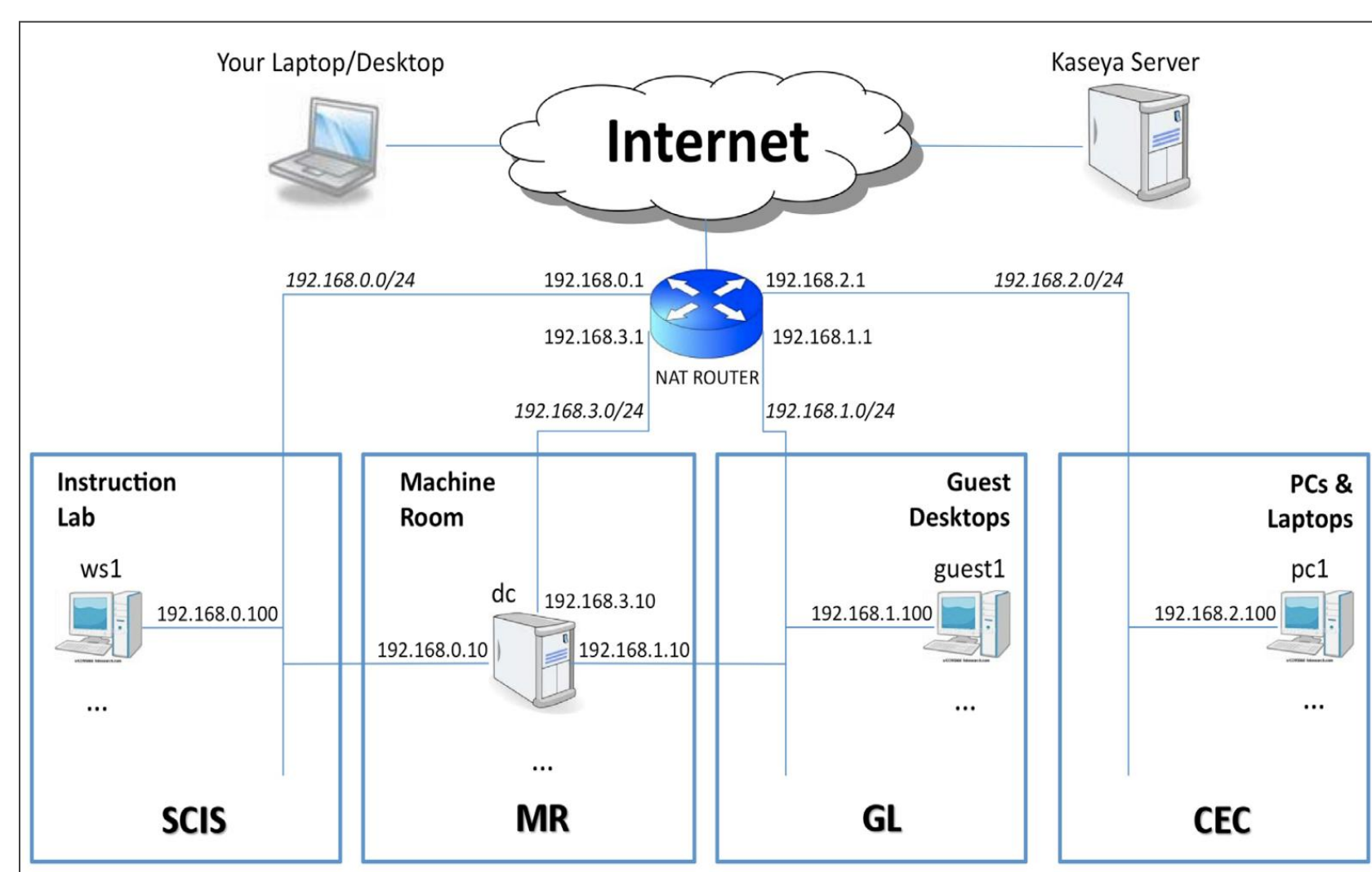
Hands-On Exercises

The hands-on exercises are based on the module associated with the chapter. The exercises are designed to be solved through Kaseya. Problems range from common different Information Technology topics like, but not limited to: Network Scripting, Backups, Internet Security, Ticketing, Patch Management, Auditing, and Computer Monitoring.

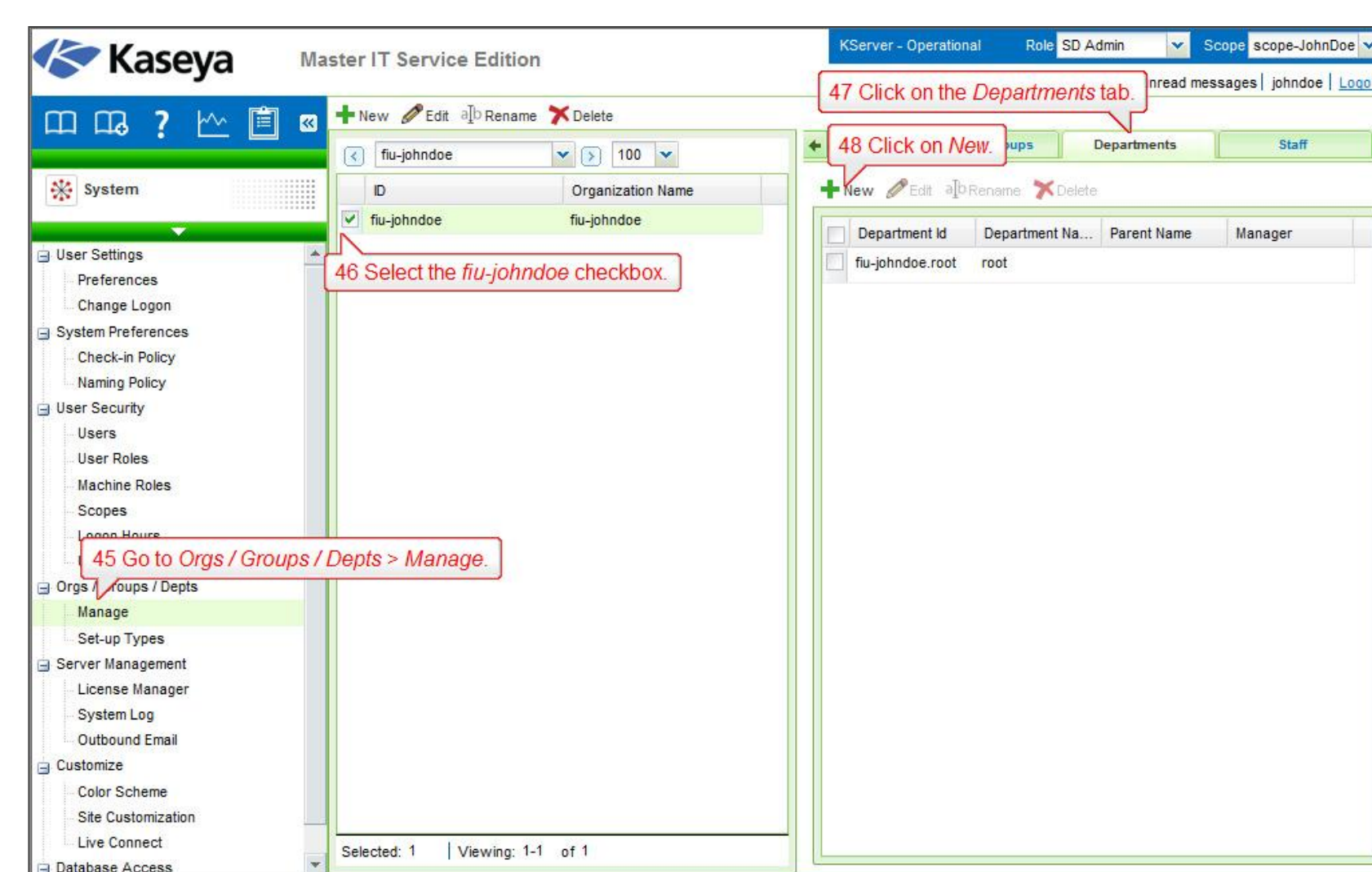
Guided Solution

The solution comes through the guided hands on exercises. With the use of numbered steps, notes & tips, and labeled screenshots, the user will fully understand what he/she is doing and have a better understand of how to manage an environment. Each section provides a brief explanation of how the solution works.

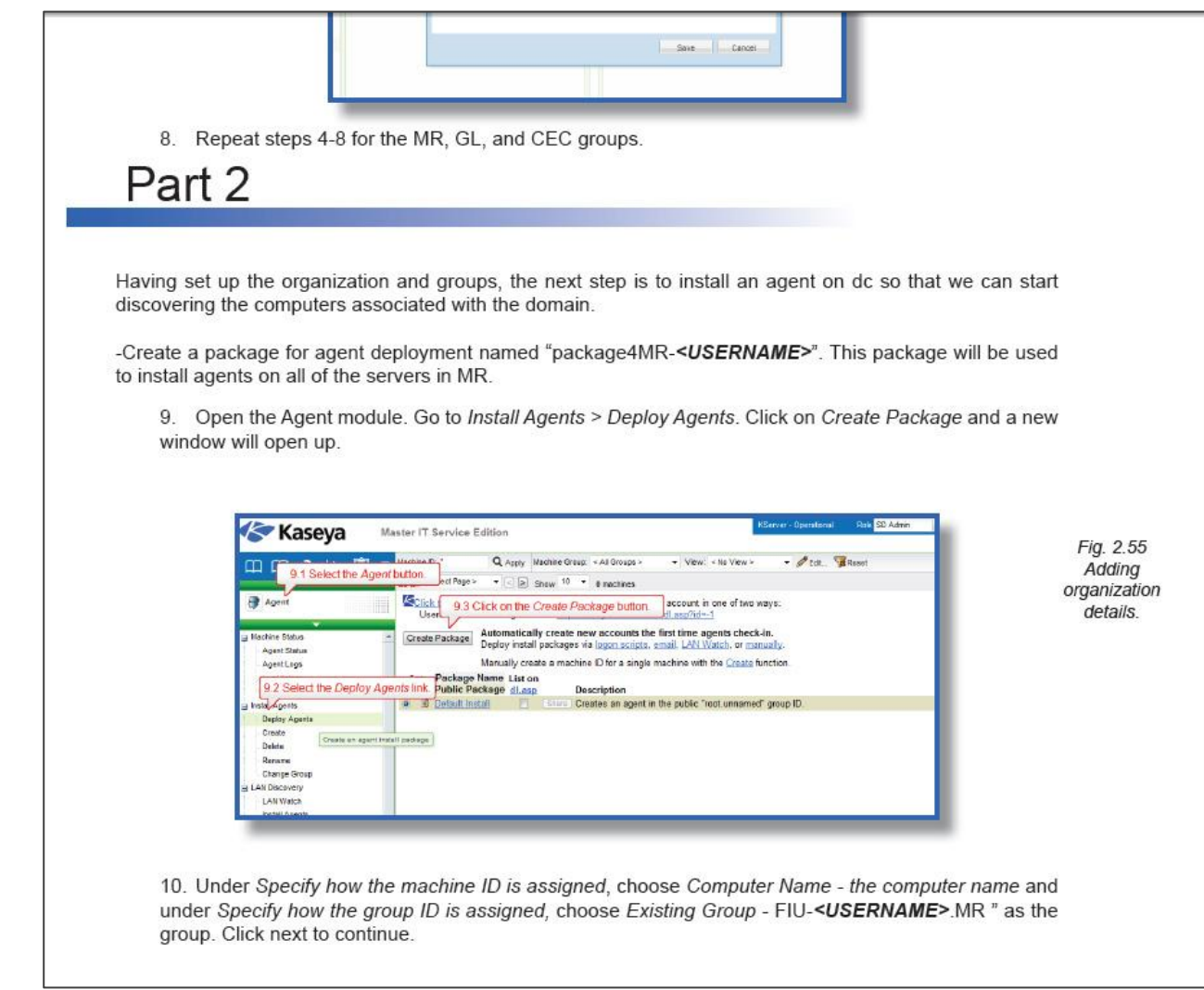
A Real-World Scenario



A Screenshot of Kaseya



Step-By-Step Instructions

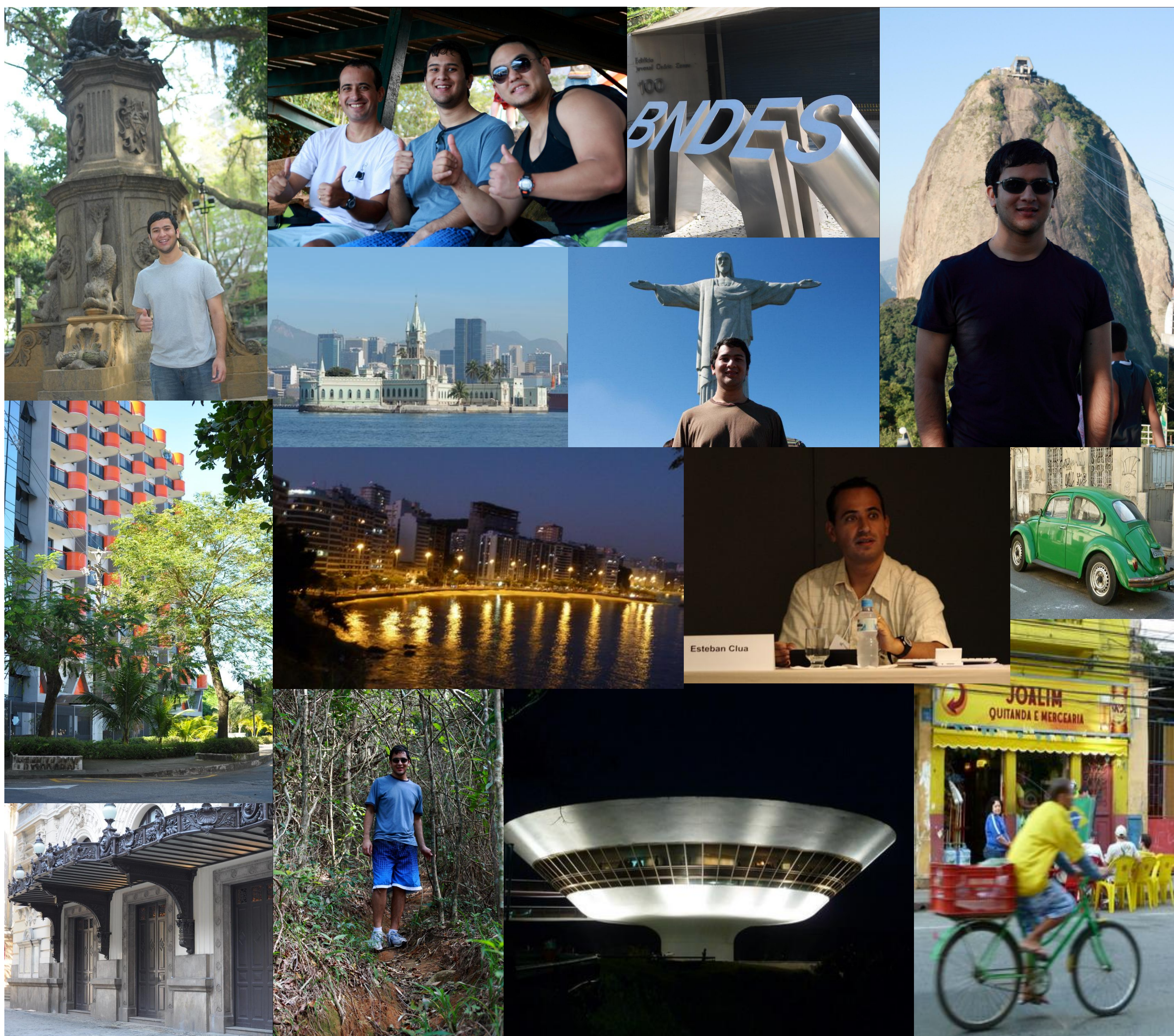


Final Report

At the end of each exercise, there will be a final report generated by the user. If the report signifies that the problem is solved then the user knows he/she has done the work successfully. If there are any problems, then the final report will make a note of the issue.

Outcome: The outcome of this project are virtual hands-on education models. With the help of virtual machines, hands-on guides, screenshots, and final solutions, students will quickly get familiar with IT Automation concepts and solutions. By providing real-world scenarios of IT management issues in virtual environments, students learn how an IT professional deals with the issues in real environments .

II. International Experience



People and Work Culture

Brazil is an amazing country and an incredible place to work. Brazilian cuisine is incredibly tasteful. Brazilian food is great because of how natural their ingredients are since artificial preservatives are rarely used. Some of their most notable items are Açaí, Pão de Queijo, and many variety of seafood dishes.

The Brazilians have proven to be a joyful and friendly people who "work to live" instead of "live to work"--quite opposite from the view I believe is afforded by most Americans. But that doesn't mean Brazilians do not work hard. Brazilians have shown how hard they work and how knowledgeable they can be in the Computer Science field.

Sightseeing

Brazil has many things to see and do. It has one of the most beautiful beaches on the planet that consist of Ipanema, Copacabana, and Leblon just to name a few. Rio de Janeiro, Brazil is most famous for it's statue, The Christ Redeemer, that overlooks the city. It's a national symbol of Brazil and visited regularly by tourist. Rio de Janeiro contains many mountain ranges and proved to be fun to hike up to the peak and overlook the beautiful city of Rio de Janeiro.

Overall Experience

Overall my experience in Brazil proved to be an amazing and life changing experience. Brazilians are greatly helpful and overall an amazing group of people. I've made relationships with people that will last a lifetime and gain knowledge that will last as equally the same. There is an incredible atmosphere of unity that drives Brazilians and that is shared through the sport, football. The passion they share and the ability for all Brazilians to have the love of the sport in common is an incredible thing to see. The experience given to me by PIRE has been a privilege to have and has made me a more knowledgeable individual.

III. Acknowledgement

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