

# RM3 – Fast Deployment Tools

Active Directory Integration Tools

**Industry Partner:** Cian Byrne

**Location of Partner:** North Sydney & Online/Remote

**URL for Partner:** NA

**Contact Person:**

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Phone:

**General field/discipline:** Big Data, DevOps, Web Development, Server Environments

**Specific requirements/skills:**

This project is for students who want a serious real-world industry experience. They will need to be self-motivated and goal focused, with an Interest in web development and big data processing. Skills in .NET development languages (C#, VB) or Web Development (Full-Stack). Discuss other options with client. Need Python3 understanding.

Python, Web Development, MS PowerShell

**Project Outline:**

Developing tools to create standard operating environments for a large client. This client is using Windows Server 2019 and is looking at upgrading all their servers to a standard Active Directory structure. This organisation has over 160+ servers.

The task is to build the standard deployment tools for the client that can run on Windows Server 2019 and deploy a new server as fast as possible. This includes installing all the required services, configuring the server's settings based on a configuration file (DHCP, DNS, GPOs, etc) and setting up the Active Directory structures.

Students will be required to build and test this application. The application must have an intuitive GUI and meet the required functionality. An existing tool already exists but is very dated and the source code is unavailable. The existing tool takes an extremely long time to run too. This project will involve a lot of research on the PowerShell language and APIs.

All delivered solutions will be tested against the existing processes.

Students will work directly with the industry partner and be able to gain valuable industry knowledge. Clients have more than 10 years of Capstone Project experience working with Sydney University.

**Reference Material/Links**

- [PowerShell Active Directory](#)
- [PowerShell Install Modules](#)