



DevOps Case Study

## Automating MAPR (Hadoop Cluster) Provisioning

for a Global Travel  
Technology Company



**50%**

Reduction in Hadoop  
cluster set-up time



**40%**

Improvement in  
Productivity



**SINGLE**

Click Infra  
Provisioning

### Customer Context & Goals

The client is one of the leading travel technology pioneer, providing robust platforms and solutions to the **Travel Industry**.

The DevOps and Cloud Automation CoE helped the customer:

- Virtualize at scale, Manage cloud Infra and Service delivery models with a single click to achieve business-IT alignment

### Challenges

Automate the setup of lambda box to reduce the time taken to set up the entire Hadoop cluster

## Solutions

- ▶ Automation, Patching and Upgradation of MapR tools using Node Hopper using Python
- ▶ Nodes configuration and roles assignment
- ▶ Download all the remote libraries for MapR tools like Oozie, Hive, Spark etc
- ▶ Implementing Puppet architecture throughout the nodes to install all MapR dependencies

## Business Benefits

- ▶ Time taken to set up the entire Hadoop cluster was reduced to 30 to 40 minutes from 2 hours earlier
- ▶ Triggering, monitoring inbuilt MapR tools for preparing MapRFS on top of Linux to ensure all map services are up and running within minutes

## Tools and Environment



**Automation**  
Python, Ruby



**Configuration Management**  
Puppet



**Tools**  
MapR, Kerberos, Graphana