

## **D3.4 Integrated end to end data collection, management and analytics platform [Confidential Deliverable]**

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### **Summary**

This document describes the deployment of the DMP supporting the Mobilise-D Clinical Validation Study (CVS) within the Amazon Cloud (AWS). AWS provides a comprehensive, flexible, on-demand hosting environment that contains all of the services necessary to deploy and run the Mobilise-D Data Management Platform. Specifically, we make use of:

- Amazon Virtual Private Cloud (VPC): This service allows a set of resources to be configured and isolated within the AWS infrastructure. It operates as if it were a private Data Centre with networking and routing configuration under the control of the system administrator. We make use of a VPC to isolate the database, application servers and workflow enactment servers from the wider Internet.
- Relational Database Service (RDS): This service provides a fully managed database running on it's own Virtual Machine which is integrated into our VPC. Database access is strictly managed and the core platform database is inaccessible to the Internet with access only permitted to the platform Application Servers.
- EC2 is a Virtual Machine service that allows us to create the servers required to host and manage the Mobilise-D Data Management Platform (DMP).
- Amazon Simple Storage Service (S3) is a data storage platform that can store arbitrary quantities of large files. This service is the key storage for movement data files, data processing code and any other file uploaded to the DMP.

By making use of these services, we have deployed an instance of the DMP that can scale in response to data storage and processing demands, can be recovered in the event of server crashes and meets the requirements identified in the Platform Design Document deliverable.