PROJECT NAME: xxxx

INSTALLATION AND DEPLOYMENT GUIDE

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# Introduction

## Purpose

The purpose of this is to describe in technical terms the steps necessary to install the software and make it operational.

## Revision history

The Revision history table shows the date, changes, and authors who have worked on this document.

| Version/Change request number | Version date | Description of changes | Author |
| --- | --- | --- | --- |
| 0.1 | xxx | First Draft | xxx |
|  |  |  |  |
|  |  |  |  |

## Intended audience and reading suggestions

This is intended to be used by technical stakeholders of the project who will be responsible for planning, performing, or maintaining the installation or deployment, such as the Systems Administrator, Chief Information Officer (CIO), Analysts, or Developers.

It is intended that stakeholders and software support personnel can read this document and coordinate their efforts in the installation/deployment of the application.

## Roles & Responsibilities

This section provides a list of all known stakeholders with an interest in the project.

| Name | E-mail address | Role |
| --- | --- | --- |
|  |  | Network |
|  |  | Systems Administrator |
|  |  | Application Infrastructure |
|  |  | Technical Data Owner |
|  |  | Business Data Owner |
|  |  | Data Scientist |
|  |  | Data Engineer |

## Mode of Operations

|  |  |  |  |
| --- | --- | --- | --- |
| Task | Who | Status | Date Finished |
| PPM - Request for Business Project | Requestor |  |  |
| Azure Installation and Deployment Guide | Requestor |  |  |
| Define final Environment for Project | Enterprise Infra, Network, |  |  |
| Send final Install and Deployment Guide to Share Vision and Quorum | Application Owner |  |  |
| Resource Request to Share Vision | Application Owner |  |  |
| Set up VM and Azure Resources | Share Vision |  |  |
| Create User (Root, Sudo, User) | Share Vision |  |  |
| Allocate Tagging accordingly | Application Owner |  |  |
| Register VM with Red Hat Licenses |  |  |  |
| Configure Network | Network |  |  |
| Install Illumino | Network |  |  |
| Send Sudo User to Quorum | Network |  |  |
| Configure Linux Environment | Quorum\* |  |  |
| Inform Network about complete installation | Quorum\* |  |  |
| Close all Ports | Network |  |  |
| Inform Appl Owner about finished Environment | Network |  |  |
| Enter Information and User in PPM | Application Owner |  |  |

Question: Certificate, Application Infra .. .etc

*\*or other respective partner*

# Overview Resource Request

|  |  |
| --- | --- |
| Name | Name of Requestor |
| E-Mail | E-Mail of Requestor |
| Company | Company of Requestor |
| Departement | Departement of Requestor |
| Purpose | Business Project |
| Cost Center |  |
| Business Cost Center |  |
| Data Owner |  |

|  |  |
| --- | --- |
| Subscription | Name of Subscription |
| Resource Group | Name of Resource Group |
| User Rights | Name of Management Group and Secure Group |

|  |  |  |
| --- | --- | --- |
| Category | Details | Notes |
| Virtual Machine | Size |  |
|  | Name |  |
|  | Image |  |
|  | Location | Northern Europe |
|  | Authentication | SSH |
|  | Username |  |
|  | Disks | Standard HDD |
|  | Back-Up | yes |
|  | Locks | Delete, Read Only |
|  |  |  |
| Storage | Type |  |
|  | Size |  |
| Data Base | Type |  |
|  | Size |  |
|  |  |  |
| Azure Service |  |  |

# Azure Service Configurations

Virtual Machines, Storage, Database, VNet peerings provisioned within the Azure environment.

## VM 1

Installation of this product / service / application is supported on the following operation systems and versions:

* *Operating System:*
* *Image:.*
* *VM:*

### Roles, Features, and Packages

**Roles**

The following roles must be enabled on the operating system prior to installation of the software:

* - to be evaluated

**Packages**

The following software packages must be installed on the operating system prior to installation of the software. List here all Packages in regards to the Operating System.

*List relevant packages here*

* E.g. Python 3
* Further packages to be announced

### VM Configuration

Authentication

* Authentication Type: SSH Public Key
* Username:
* SSH Key: -

VM Network Configuration

* Virtual Network:
* Private IP Address:
* Public Inbound Ports: Allow selected Ports:
* Accelerated Networking
* Public Host Name

Configuration Matrix

Input Thomas Vavra

### Configured Values

Use the table below to make note of the values for your installation environment for future reference. (Note: recording of information throughout should be in keeping with your local policies for system documentation and password security).

| Information | Value |
| --- | --- |
| VM name |  |
| Database name |  |
| VM Administrator account name |  |
| DB Administrator account password |  |

# Linux Permission Structure

Use the table below to make note of the values for your installation environment for future reference. (Note: recording of information throughout should be in keeping with your local policies for system documentation and password security).

| Role | Value | Name |
| --- | --- | --- |
| Root | Full Access |  |
| Sudo |  |  |
| User | Read / Right |  |

# Templates

Name here any templates used for provisioning the VM

# Testing the Installation

1. Navigate your web browser to the Host Name you noted in section 3.2.3.
2. Ensure that the login prompt appears.

# Software and Service Installation

## SW / Service 1 Name

Any installation of software which are in regards to the model or algorithm.

### Prerequisites

1. All steps in section 2 “VM Configuration” have been performed.

### Packages and Libraries

Enter packages and libraries to be relevant for the Software installation

* Not known yet

### Installation Steps

Enter detailed Installation Steps here….

1. Open *R- Studio* and log into the VM using the account name and password you noted in section 2.1.3.
2. *Create a new database catalog named “database”*
3. *Create a new user configured for SQL Authentication named “authentication\_owner” and note the password in section 3.1.3.*
4. *Update the user mapping for the user created in step 3 to add the database role membership “db\_owner” for the catalog created in step 2.*
5. *Restore the backup for the “database” catalog with the following options:*
   * *Overwrite the existing database*
   * *Leave the database ready to use by rolling back uncommitted transactions. Additional*
   * *……………………….*

### Configured Values

Use the table below to make note of the values for your installation environment for future reference.

| Information | Value |
| --- | --- |
| Initial application administrator domain account name (domain\account) |  |
| dbo.aspnet\_Users UserId |  |
| application\_owner account password |  |
| applicationproviders\_owner account password |  |

## Application

Replace the examples in this section with step by step instructions about the web application installation or deployment.

All Applications which are operated on the software or are attached with the software e.g. git, shiny, …

### Prerequisites

1. All steps in section 2 “VM Configurations” have been performed.
2. All steps in section 3.1 “Software Installation, VM 1” have been performed.

### Installation Steps

Enter detailed Installation Steps here….

1. *Contact your administrator and note the following in section 3.2.3:*
   1. *URL*
   2. *access domain*
   3. *access user name*
   4. *access password*
2. *Contact your administrator and note the following in section 3.2.3:*
   1. *XYZ map layer service URL*
   2. *ABC map layer service URL*
3. *Log in as a server administrator.*
4. *Create a folder to house the web application files and note the location in the Physical path field in section 3.2.3.*
5. *Copy deployment files to the folder you created in step 2.*
6. *Open the IIS Manager console Snap-In.*
7. The application should be assigned an application pool separate from other web applications running on the server. The steps to create the application pool are:
8. Right-click “Application Pools” in the Internet Information Services (IIS) Manager Snap-In and choose “Add Application Pool”
9. …………………………………..

### Configured Values

Use the table below to make note of the values for your installation environment for future reference.

| Information | Value |
| --- | --- |
| Physical path |  |
| IP Address (if static) |  |
| Host name |  |
| Application URL |  |
| Application dashboard access domain |  |
| Application dashboard access user name |  |
| Application dashboard access password |  |
| XYZ map layer service URL |  |
| ABC map layer service URL |  |

**Client User Access**

Provide Information as detailed as possible on which layer user need permission depending on type and role.

| User | Access | Role | Type |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Model Architecture

# Data and Information Flow

## 9.1. Data Source

Data Source: *source system, data base …*

* Hardware: xxx

## 9.2. Data Structure

* Data Format: e.g. csv
* Data Size: *Starting data size to be defined, upload see below* ..

## 9.3. Data Transfer (Connection / Manual)

Describe mode of data transfer

* E.g. Data is manually exported into CSV files and uploaded to the cloud storage.
* Tables from Database:
  + xxx

## 9.4. Publication Structure

To be filled out by Enterprise Infrastructure – what types of certificates are used or needed.

* Internal Certification
* F5 publication

# System Landscape

*Drawing of System Landscape*

# Operations

To be documented from IM Operations or respective Partner