# TABLE OF CONTENTS

- **GETTING STARTED WITH THE DEPLOYMENT** ................................................................. 4
- **CONFIGURING THE IP ADDRESS IN TALENA GUI** .................................................. 7
  - Finding the IP address to set up Hive for HDI cluster ........................................ 7
  - Setting the IP address ................................................................................................. 10
Getting started with the deployment

This section describes the procedure of deploying HDI+Talena resources to your Azure subscription in five easy steps:

1. Install Azure CLI
2. Clone the repo from github.com
3. Modify the JSON parameters
4. Validate the deployment
5. Launch the deployment

To deploy HDI+Talena resources:

1. Install Azure CLI.
   curl -L https://aka.ms/InstallAzureCli | bash

    [azure@server4 ~]$ az login
    To sign in, use a web browser to open the page https://aka.ms/devicelogin and enter the code H6WR42QNV to authenticate.

    {
    
      "cloudName": "AzureCloud",
      "id": "7bd1ce62-b5d3-40ec-9792-07145f619a50",
      "isDefault": true,
      "name": "Pay-As-You-Go",
      "state": "Enabled",
      "tenantId": "8ca2403a-3a8f-4da8-9a9a-5dddd34ac0eb",
      "user": {
        "name": "companyname@company.com",
        "type": "user"
      }
    }

2. Open a Web browser, type the URL https://aka.ms/devicelogin, and then type the code given on the screen to authenticate:
3. Clone the template repository available on github.com:

```bash
#~/talena/azure$ git clone git@github.com:Talena/public-templates.git
Cloning into 'public-templates'...
X11 forwarding request failed on channel 0
remote: Counting objects: 49, done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 49 (delta 0), reused 3 (delta 0), pack-reused 41
Receiving objects: 100% (49/49), 20.90 KiB | 0 bytes/s, done.
Resolving deltas: 100% (18/18), done.
Checking connectivity... done.
```

```bash
#~/talena/azure$ cd public-templates/replication-template/
```

4. Modify the JSON template to enter values against the respective parameters as shown below:

```json
{
    "artifactsBaseUrl": { "value": "https://talenahdistorageaccount.blob.core.windows.net/talenahdi" },
    "firstName": { "value": "John" },
    "lastName": { "value": "Hopkins" },
    "company": { "value": "Talena" },
    "email": { "value": "jhopkins@talena-inc.com" },
    "phone": { "value": "+91 1234567890" },
    "title": { "value": "Senior Developer" },
    "licenseKey": { "value": "1234567890" },
    "clusterName": { "value": "talenaazurevd1" },
    "username": { "value": "talena" },
    "password": { "value": "example@123" },
    "clusterLoginUserName": { "value": "admin" },
    "clusterLoginPassword": { "value": "hdinsight@123" },
    "sharedKey": { "value": "abc123" },
    "location1": { "value": "West US" },
    "location2": { "value": "East US" }
}
```
5. Validate the deployment of the resources by assigning execute permissions to validate.sh

```bash
chmod +x validate.sh
#=./validate.sh TalenaHDIRGVD1
```

6. Ensure that the validation succeeds with the following message:

```
"provisioningState": "Succeeded",
"template": null,
"templateLink": null,
"timestamp": "2017-06-15T05:47:34.587951+00:00"
```

7. Launch the deployment of the resources:

```bash
chmod +x deploy.sh
#=./deploy.sh TalenaHDIRGVD
```

8. Login to Azure portal, and verify your deployment status by going over to the Resource Groups option, and then click the Deployments option.

![Microsoft Azure Resource Groups and Deployments screenshot]
Configuring the IP address in Talena GUI

In a multi-region deployment setup, if an HDInsight cluster is connected to Talena Cluster using VPN connection, (where HDInsight clusters are setup in different geographical regions), then the host names of HDInsight cluster may not get resolved.

In this case, you need to first find out the IP address to set up Hive for HDI cluster and then configure it at appropriate places in the Talena UI. This section describes how you can do the following:

1. Find the IP address from the Azure Portal or HDInsight Cluster Terminal
2. Setting the IP address in Talena GUI

Finding the IP address to set up Hive for HDI cluster

You can find the IP address to set up Hive in two different ways:

- From the Azure portal
- From HDInsight cluster terminal

From the Azure Portal

1. Login to the Azure portal and click the HDInsight cluster from the right pane, and then click the Cluster Dashboard.

2. Click the HDInsight Cluster dashboard.

The Ambari dashboard will be displayed...
3. Click Hive in the right pane in the Ambari dashboard screen as shown in the screenshot below:

![Ambari Dashboard Screenshot](image)

4. Click the Hive Metastore in the left pane as shown the screenshot below:

![Ambari Metastore Screenshot](image)
5. Scroll down to the bottom of the page and copy the IP address mentioned in the Summary section:

![HDInsight cluster terminal](image)

### From HDInsight cluster terminal

1. Login to the HDInsight cluster

```
$ ssh talena@talenaazurehdi2-ssh.azurehdinsight.net
```

Authorized uses only. All activity may be monitored and reported.

```
talena@talenaazurehdi2-ssh.azurehdinsight.net's password: *****
```

Welcome to Ubuntu 16.04.2 LTS (GNU/Linux 4.4.0-78-generic x86_64)

* Documentation:  https://help.ubuntu.com
* Management:  https://landscape.canonical.com
* Support:  https://ubuntu.com/advantage

Get cloud support with Ubuntu Advantage Cloud Guest:
http://www.ubuntu.com/business/services/cloud

34 packages can be updated.
23 updates are security updates.
2. Copy the IP address from the bottom the screen:

```
Welcome to HDInsight.
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
talena@hn0-talena:~$ nslookup hn0-
talena.siyy33ylzy2ebo1njb3ez1di3b.bx.internal.cloudapp.net
Server: 168.63.129.16
Address: 168.63.129.16#53
Name: hn0-talena.siyy33ylzy2ebo1njb3ez1di3b.bx.internal.cloudapp.net
Address: 10.2.1.16
```

### Setting the IP address

This section describes the procedure of setting the IP address in Talena GUI.

Once you get the IP address to set up Hive for HDI cluster, you need to access Talena UI and insert the IP address at the appropriate places.

**To set IP address in Talena UI:**

1. Login to Talena software
2. Click the **Main Menu** > **System Setup** > **Data Repositories**.
3. On the **Data Repositories** screen, click the **+** icon. The following dialog box appears:

   ![New Data Repository dialog box]

4. In the **New Data Repository** dialog box, select **Hadoop** from the **Select the type of data repository** drop-down list, and then click **OK**.
5. Type the following details:
   a. **Data Repository Name**: Type a name for the data repository. The data repository name can include alphanumeric characters, numbers and/or special characters.
   b. **Description**: A meaningful description of the data repository to help others identify it.
6. In the **Applications** section, type the following:
   a. **Primary Host**: The name or IP address of the machine on which the configuration directories related to the applications exist.
   b. **Configuration Directory**: A list of one or more paths where configuration files related to the apps exist.
7. Click **Discover**. This action displays the **Credentials** dialog box that prompts you to type your login credentials.
8. In the Credentials dialog box, under Authentication Mechanism do one of the following:
   - Click the Password option button, type the login and password, and click OK
   - Click the Private Key option button, type the login id, copy-paste the private key, type the passphrase (if you have set the passphrase), and then click OK.

This action displays a list of all applications discovered in the data repository by Talena software. For example, HDFS, HBASE and/or HIVE.

If HIVE is auto-discovered, the following fields are automatically populated.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metastore Address</td>
<td>Stores the metadata for Hive tables and partitions in a relational database</td>
<td>t35vm1</td>
</tr>
<tr>
<td>Metastore Port</td>
<td>Service for accessing metadata about Hive tables and partitions</td>
<td>9083</td>
</tr>
</tbody>
</table>

In addition, Hive Server Address and Hive Server Port fields are also automatically populated depending upon the configuration properties in the hive-site.xml file. However, if you DO NOT want to activate masking and sampling for Hive, you must manually remove the values in the Hive Server Address and Hive Server Port fields from the Talena GUI.

9. Replace the values that are automatically populated in the Hive Metastore Address and JDBC Driver Address fields with the IP address that you got from the preceding section.

10. Click Verify to confirm the selection of your Hive data repository.

11. Set a data backup window and data recovery window, and then click Save.