



HERE HLP_Geocoder Linux VM

Deployment Guide

Version 1.0.1.0

Important Information Notices

Topics:

- [Legal Notices](#)
- [Document Information](#)

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Document Information

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Chapter 1

Overview

Topics:

- [Introduction](#)
- [Solution Template Overview](#)

This document introduces the deployment steps for HERE HLP_Geocoder Linux VM on Azure Marketplace. The HERE HLP_Geocoder Linux VM Template is a Solution Template on Azure Marketplace which deploys a Linux VM containing HERE Geocoder API in your Azure Resources. The Template allows you to install multiple VM's at once, create a load balancer for multiple VM's and also sets up Map Data required for Geocoder API to function.

Introduction

The Geocoder API provides search capability for Geocoding, Reverse Geocoding and Location Search. Key features include:

Geocoding: Geocoding is the ability to match addresses to the correct location (latitude and longitude) on the map. Client applications can pass qualified addresses or a free form single search line with partial address information. For the latter, the geocoder even finds misspelled addresses.

Reverse Geocoding: The Reverse Geocoder interface allows client applications to retrieve the next street address based on a given coordinate or to retrieve the area information for the given coordinate. The difference between address and area retrieval is that for area retrieval the service does not search for the closest street address (which can be in an adjoining administrative area apart from the position that is provided for in the request). Instead, the service retrieves the administrative area information for exactly the position provided in the request.

Landmark Geocoding: Landmark Geocoding is a combination of geocoding, landmark search, and reverse geocoding. It supports searches for not only addresses and areas but also geographic regions, mountains, rivers, and widely known places (e.g., "Eiffel Tower") or places classified as being of national importance (e.g., international airports). The aggregation logic of Landmark Geocoding offers smart parsing of the text input. This means it classifies the input and directs the request to the different underlying search capabilities. The result of this service is a list of ranked locations – which can include street addresses, an administrative area, a geographic region or feature, or places.

Solution Template Overview

HERE HLP_Geocoder Linux VM Template provides you the capability to automate the provisioning of Geocoder API on your Azure VM. The solution template will guide you to build multiple new Linux VM which will be auto-provisioned with Geocoder API. It will automatically provision load balancer for the VM's and provides option to automatically download and setup Map Data required for the API. API monitoring scripts are also uploaded so that you can easily monitor the API status.

Chapter 2

Deployment Guide

Topics:

- [*Prerequisites and Requirements*](#)
- [*Deploying Solution Template on Azure Portal*](#)
- [*Downloading the Data Files*](#)
- [*World Map Data Setup*](#)
- [*Starting the HLP Geocoder API as a Service*](#)
- [*Commands for the HLP Geocoder*](#)
- [*Testing the Service*](#)

Prerequisites and Requirements

Microsoft Azure Account: You must have a Microsoft Azure account to access the solution template.

HERE B2B Download Centre Access: You must be a HERE B2B customer having access to SubscribeNet EDD (External Data Download) center, also known as the B2B Download Center. You can access B2B Download Centre using URL: <https://here.flexnetoperations.com/> in your browser. To acquire credentials to access the B2B Download center, contact HERE Licensing (licensing_here_self-hosted_HLS_on-Azure@here.com).

Deploying Solution Template on Azure Portal

The below steps help you deploy HERE HLP_Geocoder Linux VM Template in your Azure resource group.

Step 1: On Azure Marketplace (<https://azuremarketplace.microsoft.com/en-us>), search for HERE Geocoder – Self-Hosted Server. Click on Get it Now button to begin the installation. Follow the prompts to proceed with template deployment.

Figure 1: HERE HLP_Geocoder Linux VM in Azure Marketplace

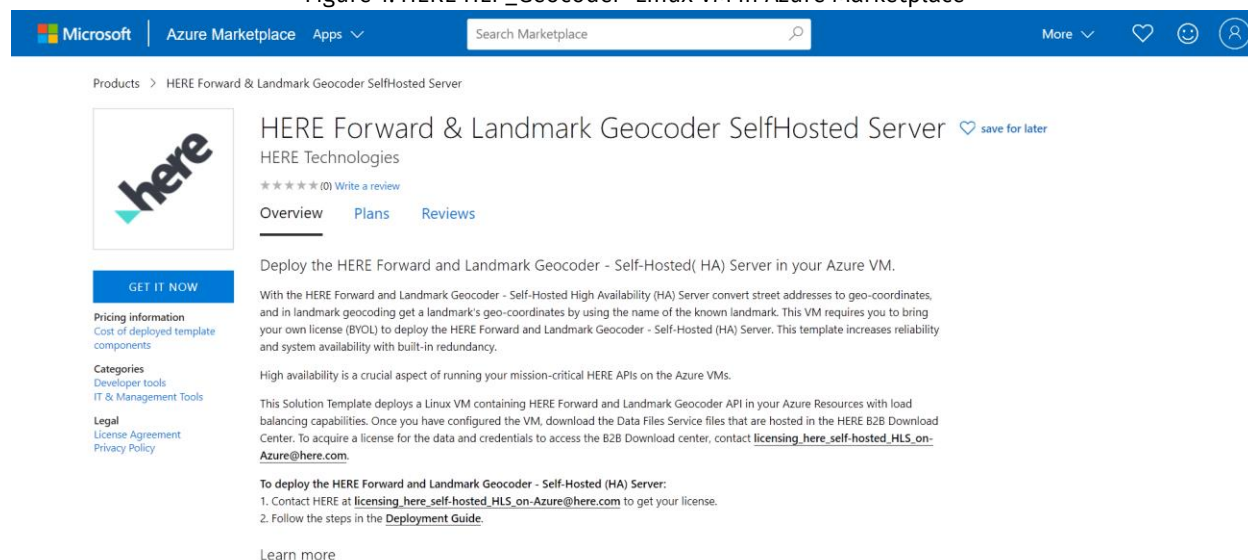


Figure 2: HERE HLP_Geocoder Linux VM Marketplace

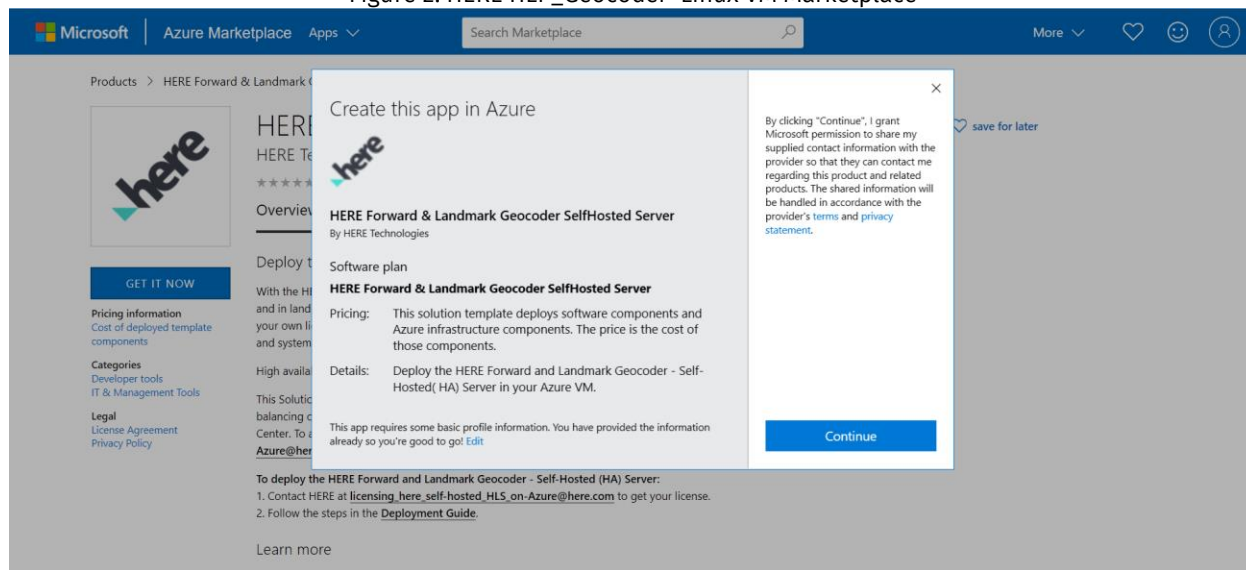
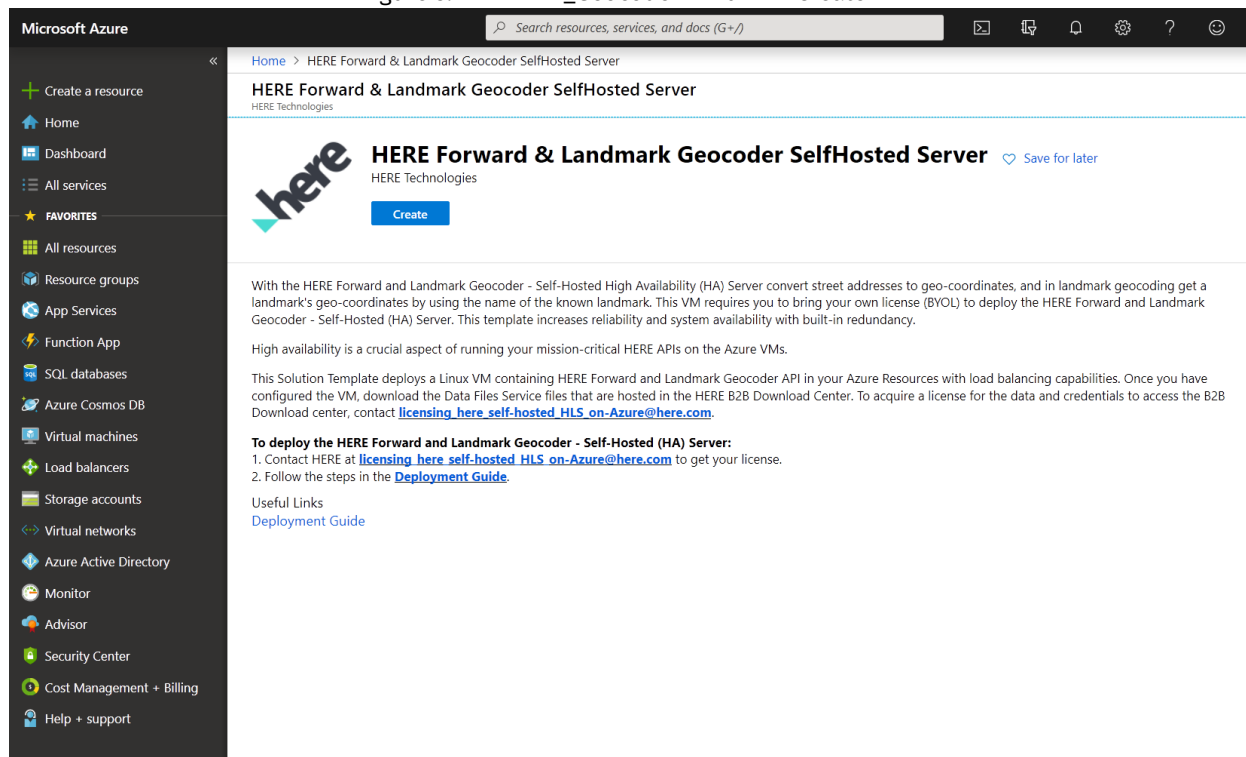
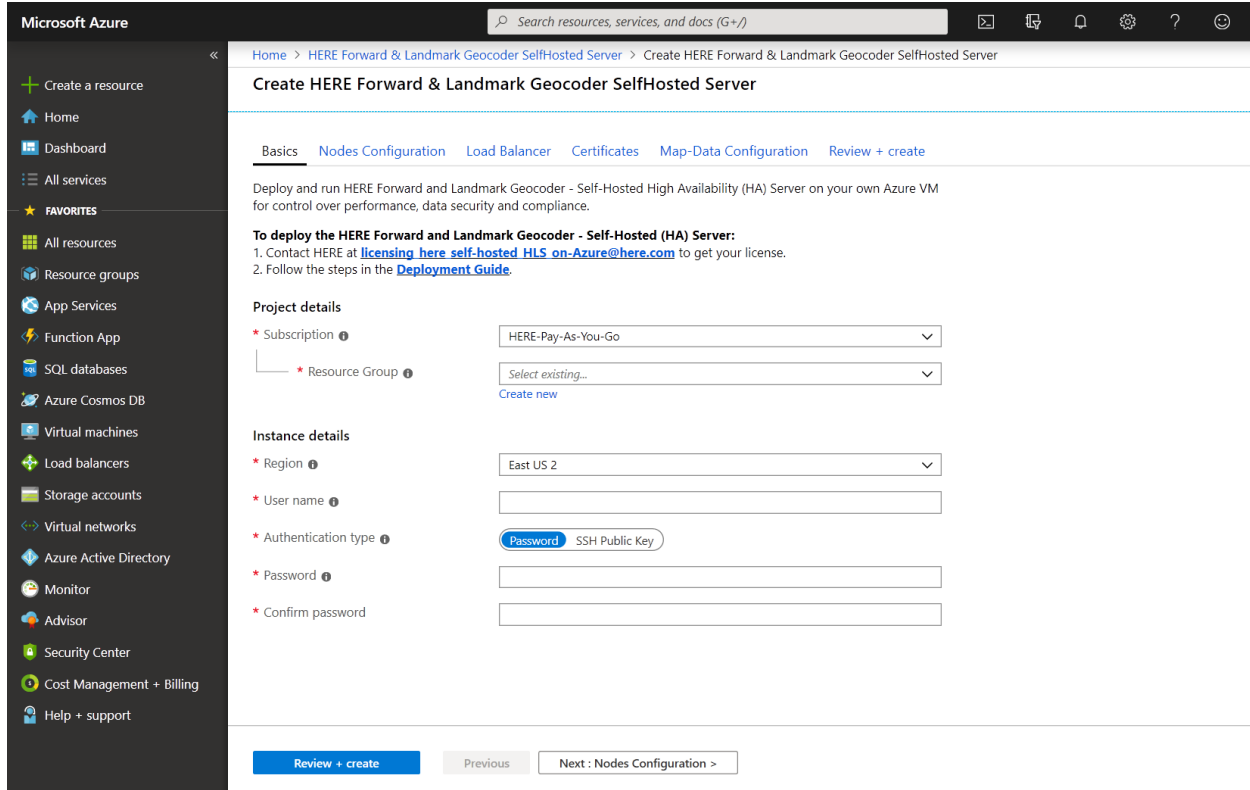


Figure 3: HERE HLP_Geocoder Linux VM Create VM



Step 2: You will be re-directed to the template. Please provide relevant details in the fields to proceed to next section.

Figure 4: HERE HLP_Geocoder Linux VM Basic Details



Microsoft Azure

Search resources, services, and docs (G+/)

Home > HERE Forward & Landmark Geocoder SelfHosted Server > Create HERE Forward & Landmark Geocoder SelfHosted Server

Create HERE Forward & Landmark Geocoder SelfHosted Server


Basics Nodes Configuration Load Balancer Certificates Map-Data Configuration Review + create


Deploy and run HERE Forward and Landmark Geocoder - Self-Hosted High Availability (HA) Server on your own Azure VM for control over performance, data security and compliance.

To deploy the HERE Forward and Landmark Geocoder - Self-Hosted (HA) Server:


1. Contact HERE at licensing_here_self-hosted_HLS_on-Azure@here.com to get your license.
2. Follow the steps in the [Deployment Guide](#).


Project details


* Subscription  HERE-Pay-As-You-Go


* Resource Group  Select existing...
[Create new](#)

Instance details

* Region  East US 2

* User name 

* Authentication type  Password SSH Public Key

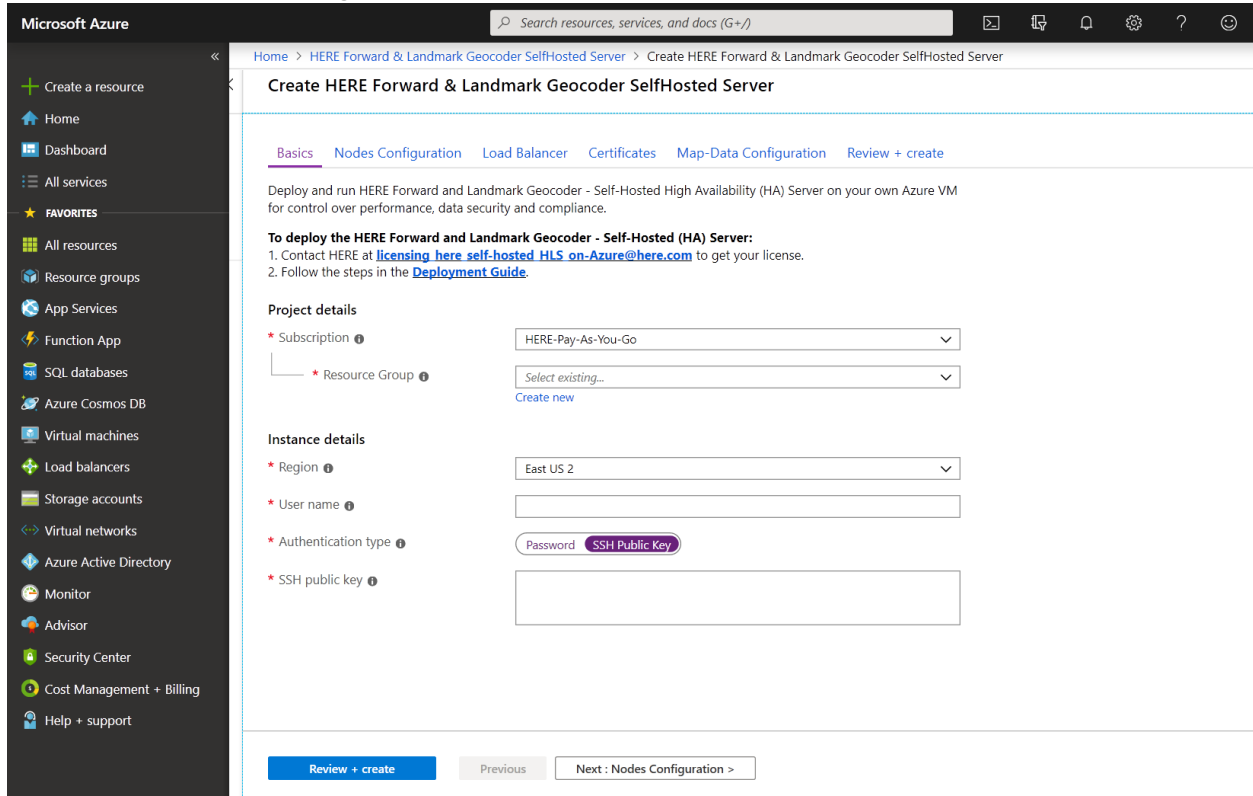
* Password 

* Confirm password

[Review + create](#) [Previous](#) [Next : Nodes Configuration >](#)

Step 3: You can use two authentication types for accessing the VM, namely “Password” or “SSH Public Key”. Please select one of the options and provide the relevant details. Once you have provided all the relevant information, please click on “OK” to proceed to next section.

Figure 5: HERE HLP_Geocoder Linux VM Basic SSH Details



Microsoft Azure

Search resources, services, and docs (G+)

Home > HERE Forward & Landmark Geocoder SelfHosted Server > Create HERE Forward & Landmark Geocoder SelfHosted Server

Create HERE Forward & Landmark Geocoder SelfHosted Server


Basics Nodes Configuration Load Balancer Certificates Map-Data Configuration Review + create


Deploy and run HERE Forward and Landmark Geocoder - Self-Hosted High Availability (HA) Server on your own Azure VM for control over performance, data security and compliance.

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Project details


* Subscription  HERE-Pay-As-You-Go


* Resource Group  Select existing...
[Create new](#)

Instance details

* Region  East US 2

* User name 

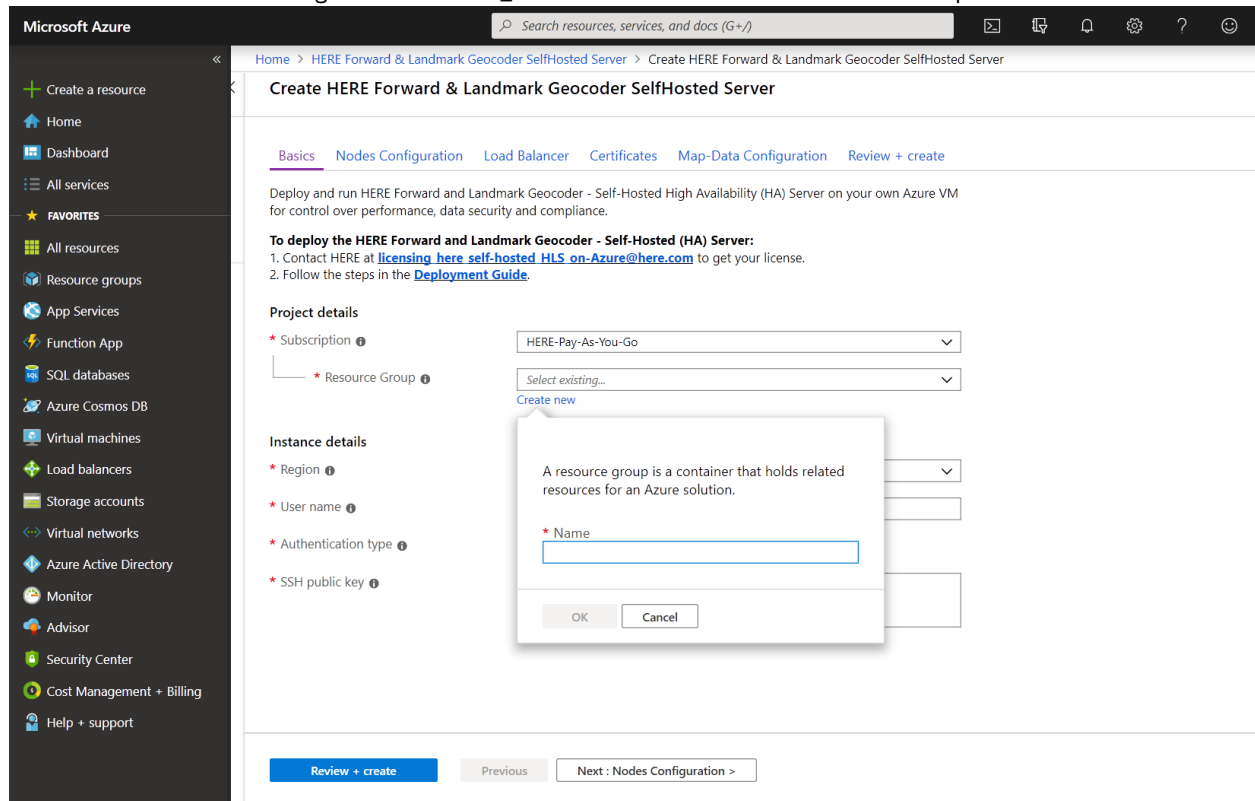
* Authentication type  Password SSH Public Key

* SSH public key 

[Review + create](#) [Previous](#) [Next : Nodes Configuration >](#)

Step 4: You can choose any existing Resource Group to create the VM or you can create a new one using the option “create new” under Resource Group field.

Figure 6: HERE HLP_Geocoder Linux VM Basic Resource Group



Microsoft Azure

Search resources, services, and docs (G+)

Home > HERE Forward & Landmark Geocoder SelfHosted Server > Create HERE Forward & Landmark Geocoder SelfHosted Server

Create HERE Forward & Landmark Geocoder SelfHosted Server


Basics Nodes Configuration Load Balancer Certificates Map-Data Configuration Review + create


Deploy and run HERE Forward and Landmark Geocoder - Self-Hosted High Availability (HA) Server on your own Azure VM for control over performance, data security and compliance.

To deploy the HERE Forward and Landmark Geocoder - Self-Hosted (HA) Server:



1. Contact HERE at licensing_here_self-hosted_HLS_on-Azure@here.com to get your license.
2. Follow the steps in the [Deployment Guide](#).


Project details



* Subscription  HERE-Pay-As-You-Go


* Resource Group  Select existing...
[Create new](#)

Instance details

* Region  

* User name 

* Authentication type  

* SSH public key 

A resource group is a container that holds related resources for an Azure solution.

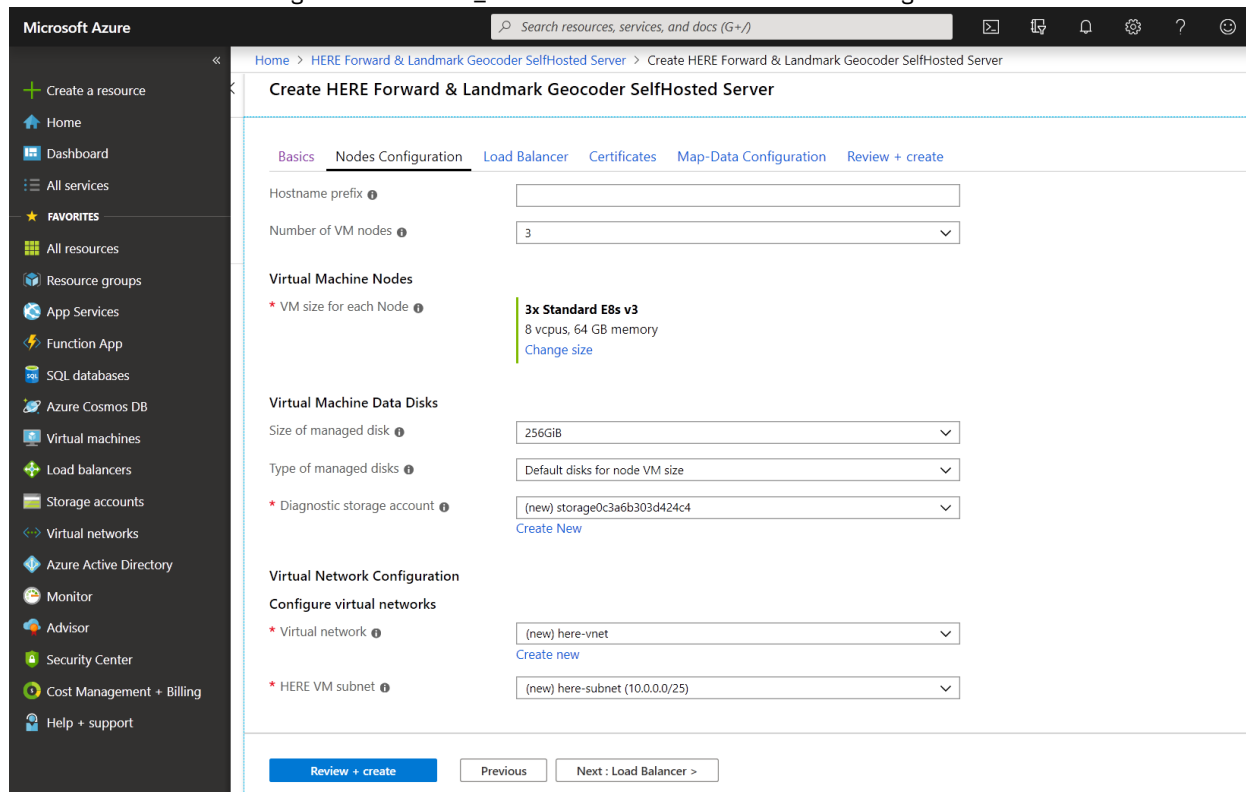
* Name

OK Cancel

[Review + create](#) [Previous](#) [Next : Nodes Configuration >](#)

Step 5: You now need to provide Host Prefix, No. of VM required, Size, storage and network details of the VM. To run Geocoder API, VM must have 4 GB or more RAM. Host prefix is used to identify the VM's created as part of Azure resource, this string will be pre-fixed to all the resources created as part of the deployment. You should have at least 300 GB of disk space if you wish to setup Map Data during the provisioning of VM. Kindly provide relevant values to the field and click on “OK” to proceed.

Figure 7: HERE HLP_Geocoder Linux VM Basic Nodes Configuration



The screenshot displays the 'Nodes Configuration' tab in the Azure portal for creating a 'HERE Forward & Landmark Geocoder SelfHosted Server'. The interface includes a left-hand navigation pane with various Azure services and a main configuration area with the following sections:

- Basics**: Includes 'Hostname prefix' (text input) and 'Number of VM nodes' (dropdown menu set to 3).
- Virtual Machine Nodes**: Includes 'VM size for each Node' (dropdown menu showing '3x Standard E8s v3' with '8 vcpus, 64 GB memory' and a 'Change size' link).
- Virtual Machine Data Disks**: Includes 'Size of managed disk' (dropdown menu set to '256GiB'), 'Type of managed disks' (dropdown menu set to 'Default disks for node VM size'), and 'Diagnostic storage account' (dropdown menu showing '(new) storage0c3a6b303d424c4' with a 'Create New' link).
- Virtual Network Configuration**: Includes 'Configure virtual networks' with 'Virtual network' (dropdown menu showing '(new) here-vnet' and a 'Create new' link) and 'HERE VM subnet' (dropdown menu showing '(new) here-subnet (10.0.0.0/25)').

At the bottom of the configuration area, there are three buttons: 'Review + create' (highlighted in blue), 'Previous', and 'Next: Load Balancer >'.

Step 6: Next you have to select the type of load balancer you would like to provision to manage the VM's. For security purpose, VM's created as part of this are accessed via jump box and services can be accessed from load balancer. All VM's do not provide public IP's for external access and can be accessed from jump box server. You can create "external" or "internal" load balancers as part of deployment. Please select desired size of Jump Box and click OK to proceed.

Figure 8: HERE HLP_Geocoder Linux External Load Balancer

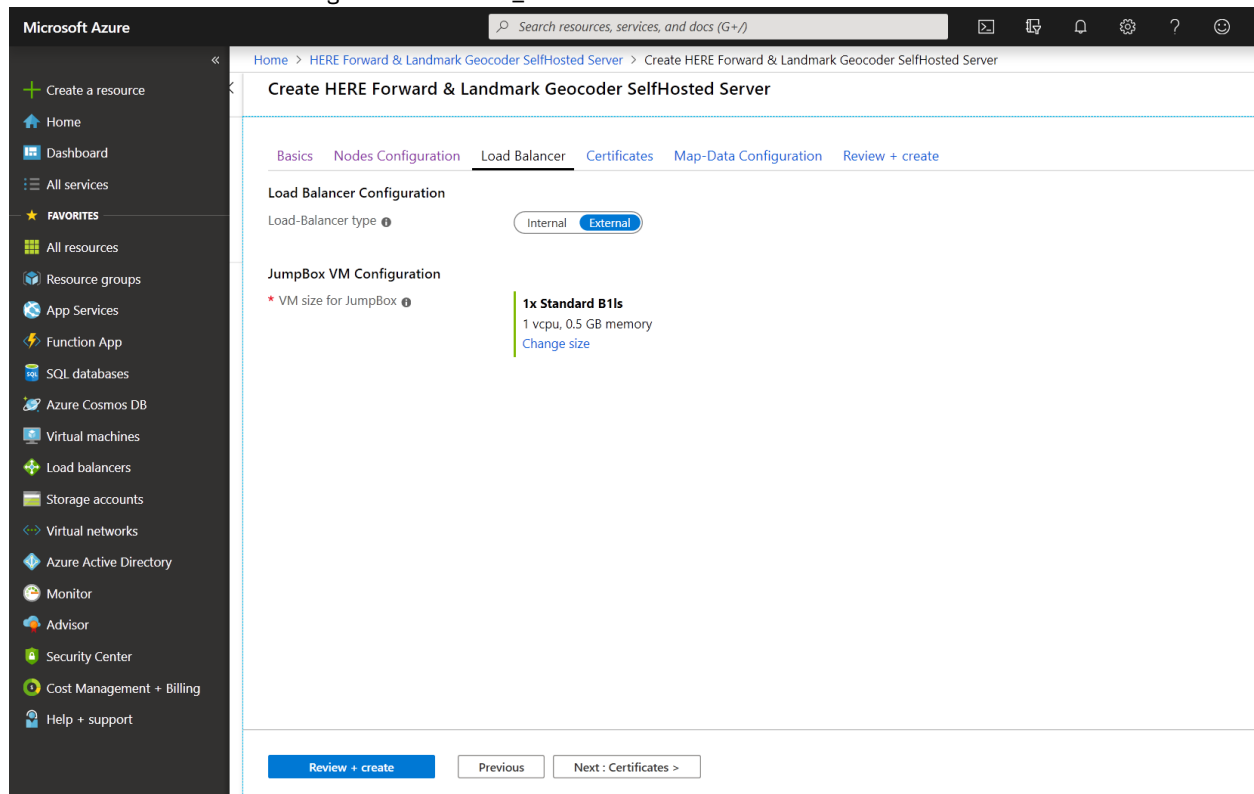
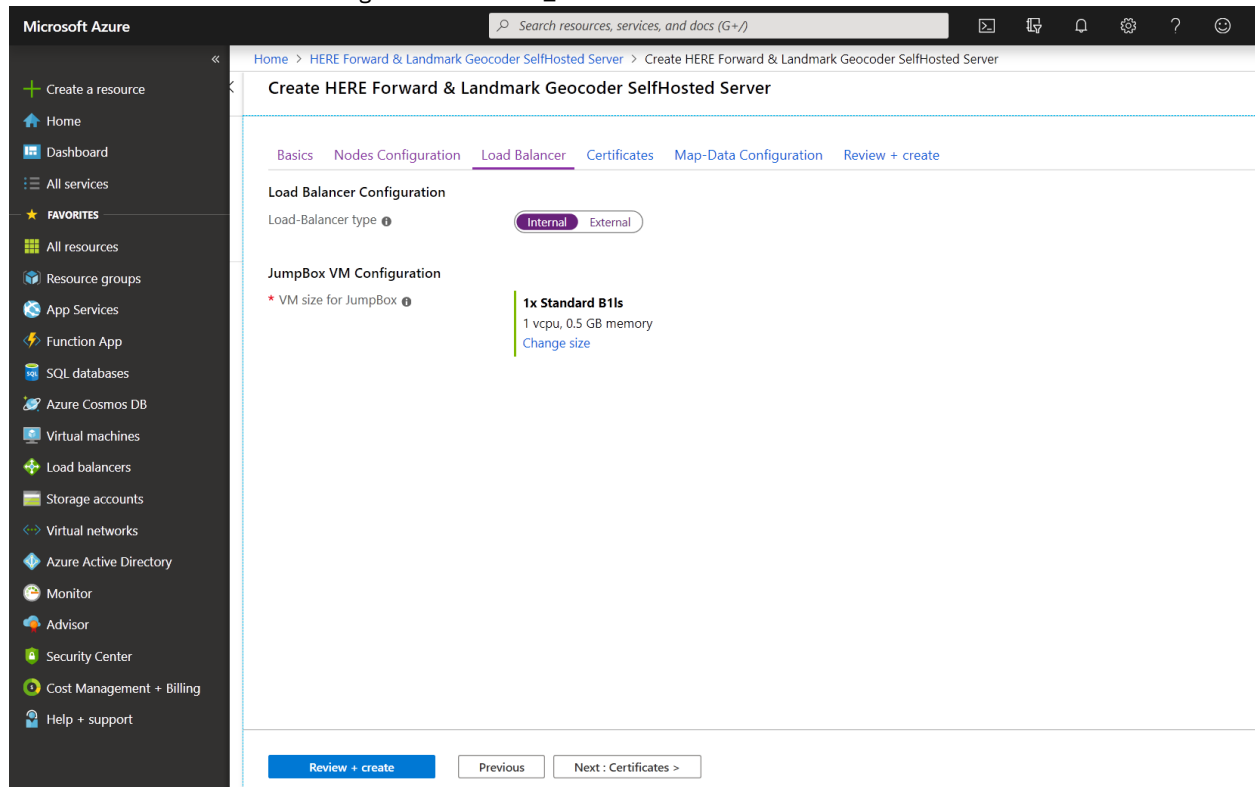


Figure 9: HERE HLP_Geocoder Linux Internal Balancer



Step 7: If you would like to secure the service using SSL certificates, select “Yes” and upload the details of the certificate. If you do not have a certificate available at this time or do not wish to use SSL certificate, please select “No” and click on OK to proceed.

Figure 10: HERE HLP_Geocoder Linux SSL Certificate

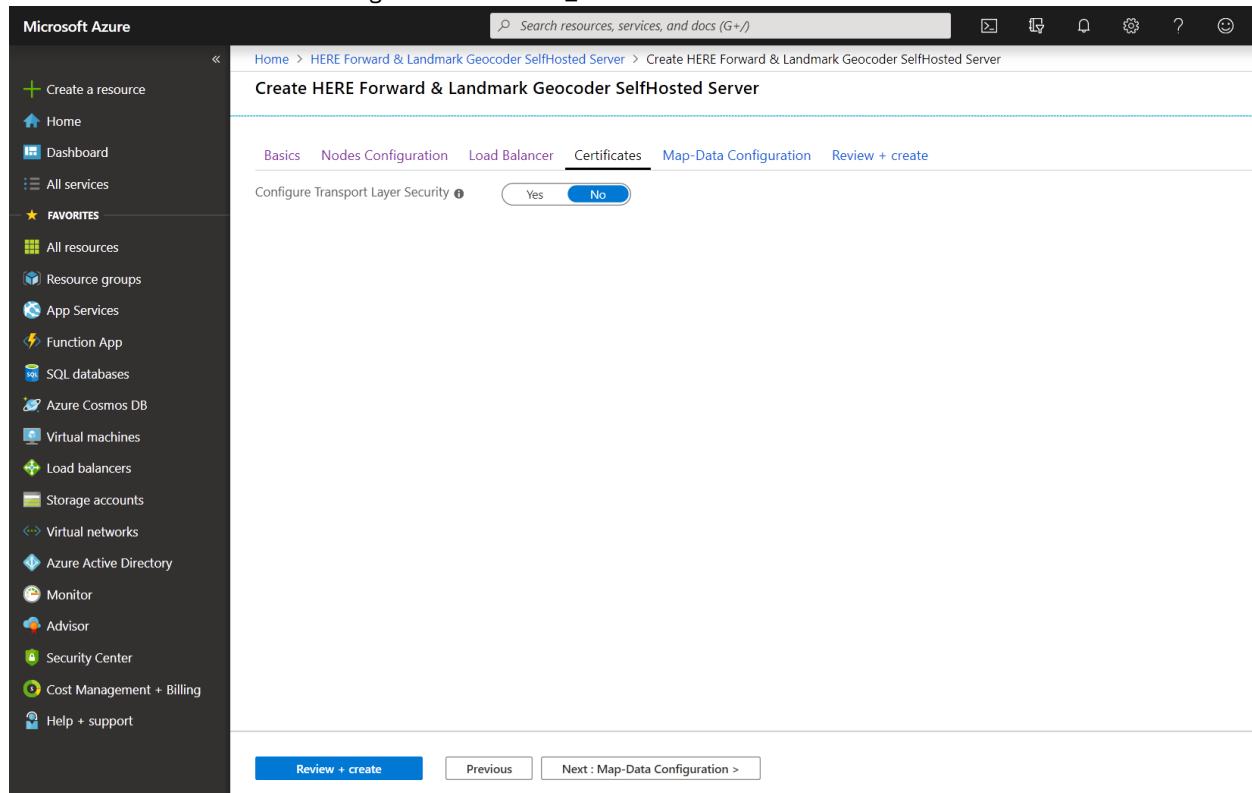
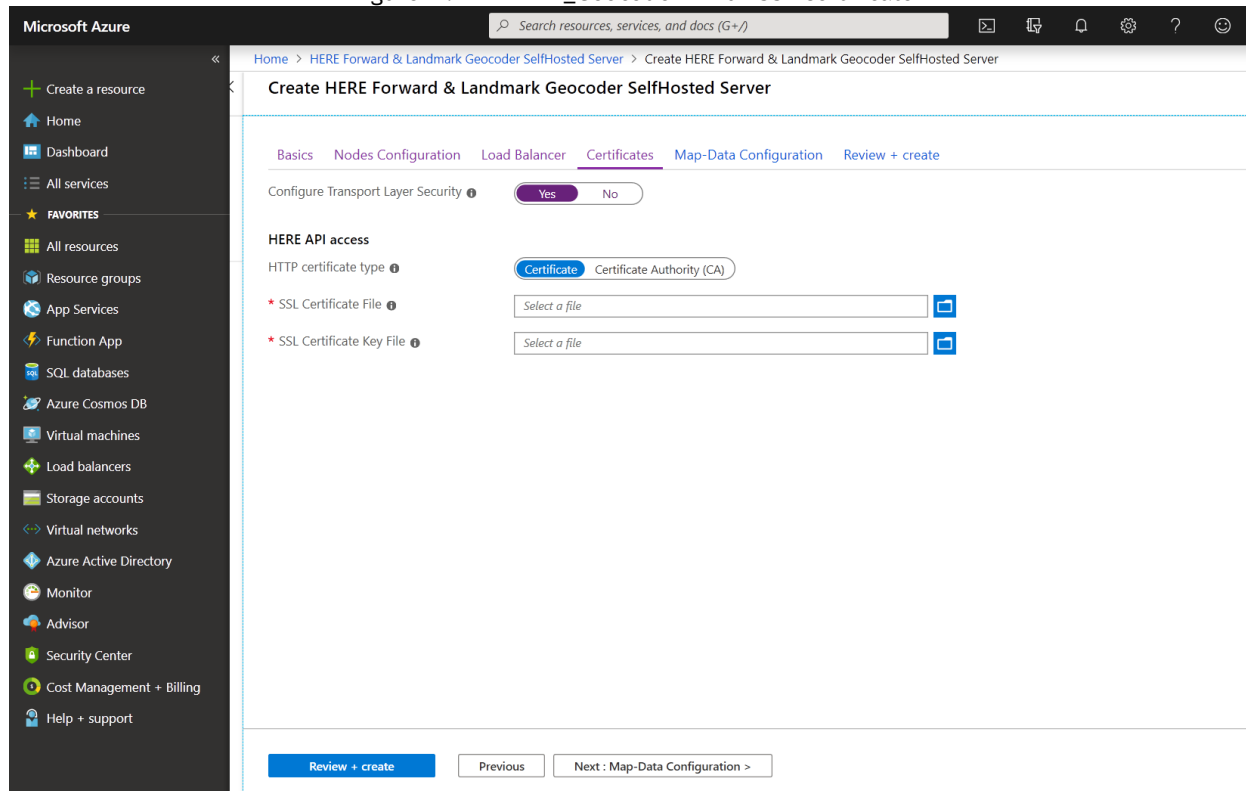



Figure 11: HERE HLP_Geocoder Linux SSL Certificate



The screenshot displays the Microsoft Azure portal interface for creating a HERE Forward & Landmark Geocoder SelfHosted Server. The left sidebar shows the Azure navigation menu with categories like 'Create a resource', 'Home', 'Dashboard', 'All services', and 'FAVORITES'. The main content area shows the 'Create HERE Forward & Landmark Geocoder SelfHosted Server' wizard with tabs for 'Basics', 'Nodes Configuration', 'Load Balancer', 'Certificates', 'Map-Data Configuration', and 'Review + create'. The 'Certificates' tab is active, showing the 'Configure Transport Layer Security' toggle set to 'Yes'. Under 'HERE API access', the 'HTTP certificate type' is set to 'Certificate'. Below this, there are two fields: 'SSL Certificate File' and 'SSL Certificate Key File', both with 'Select a file' buttons. At the bottom, there are three buttons: 'Review + create', 'Previous', and 'Next : Map-Data Configuration >'.

Step 8: If you wish to setup Map Data automatically at the time of installation instead of setting it manually at a later time, please select “Yes” and provide flexnet URL for your account, else select “No” to proceed. To obtain the flexnet url, please login to B2B download center using your credentials. You can access B2B Download Centre using URL: <https://here.flexnetoperations.com/> in your browser. To acquire credentials to access the B2B Download center, contact HERE Licensing (licensing_here_self-hosted_HLS_on-Azure@here.com). Once you have logged in, browse for the product and right click to copy link. Paste the same link in the text box and click “OK” to proceed.

Figure 12: HERE HLP_Geocoder B2B Download Center



HERE DATA PRODUCTS
[Product Categories](#)
[Product Search](#)
[Recent Email Notifications](#)
[Recently Uploaded Files](#)
[Files Not Downloaded](#)

ADMINISTRATION
[Account Members](#)
[Change Password](#)
[Download Preferences](#)

INFORMATION
[Download Help](#)
[FAQs](#)
[User Manual](#)
[Support](#)
[Logout](#)

B2B Download Center

Scripts can be utilized to automate downloads with HTTPS. An XML and/or Excel list of Files Available and Not Downloaded, with download links, is available in the menu panel to assist in the automation. Contact TCS@HERE.com with questions.

Login ID

Password


☐ Remember my password until I logout

Login

If you have forgotten your login ID, password, or are not sure whether you have an account use our [Password Finder](#). For other assistance, contact [Support](#).

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Figure 13: HERE HLP_Geocoder B2B Download Center



Account Name:
HERE

HERE DATA PRODUCTS
[Product Categories](#)
[Product Search](#)
[Recent Email Notifications](#)
[Recently Uploaded Files](#)
[Files Not Downloaded](#)

ADMINISTRATION
[Account Members](#)
[Change Password](#)
[Download Preferences](#)
[Email Preferences](#)

INFORMATION
[Download Help](#)
[FAQs](#)
[User Manual](#)
[Support](#)
[Logout](#)

B2B Download Center

Version translation can be found in the Product Availability Dates schedule located in the Documentation and Tools section.

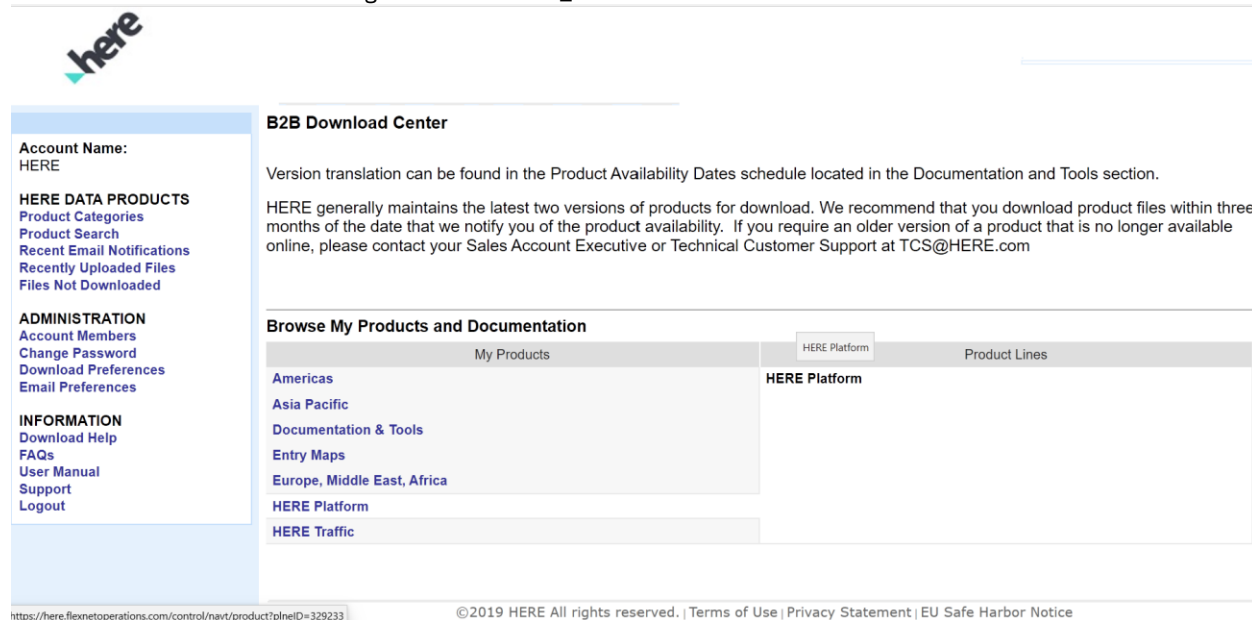
HERE generally maintains the latest two versions of products for download. We recommend that you download product files within three months of the date that we notify you of the product availability. If you require an older version of a product that is no longer available online, please contact your Sales Account Executive or Technical Customer Support at TCS@HERE.com

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Entry Maps	
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Figure 14: HERE HLP_Geocoder B2B Download Center



B2B Download Center

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HERE

HERE DATA PRODUCTS
[Product Categories](#)
[Product Search](#)
[Recent Email Notifications](#)
[Recently Uploaded Files](#)
[Files Not Downloaded](#)

ADMINISTRATION
[Account Members](#)
[Change Password](#)
[Download Preferences](#)
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INFORMATION
[Download Help](#)
[FAQs](#)
[User Manual](#)
[Support](#)
[Logout](#)

Version translation can be found in the Product Availability Dates schedule located in the Documentation and Tools section.

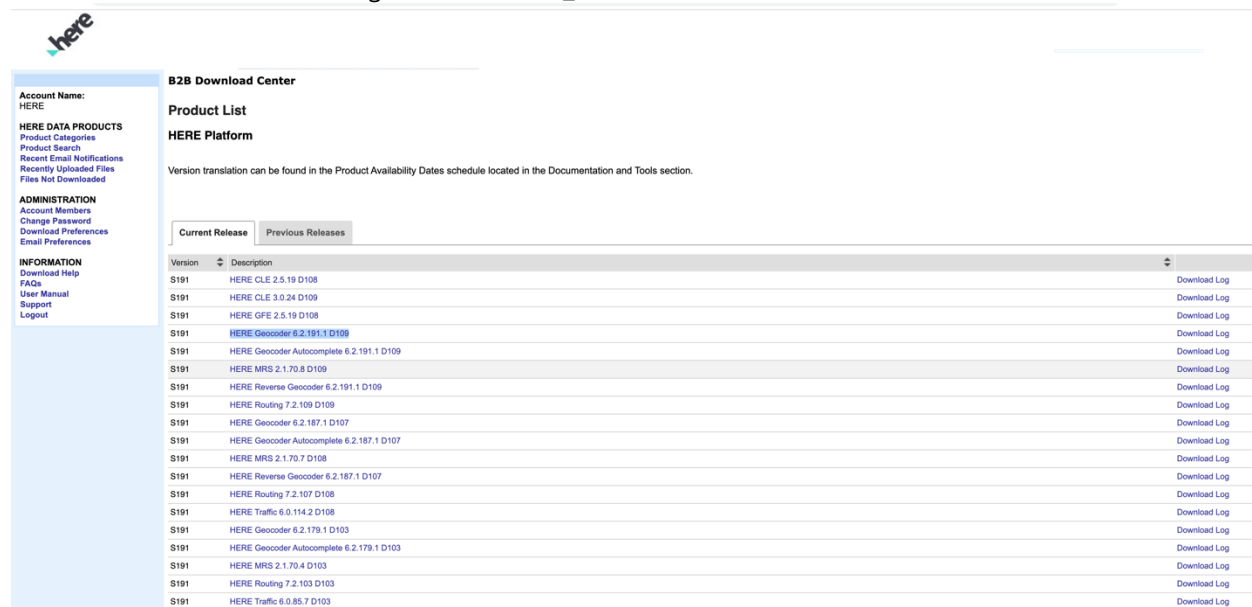
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Figure 15: HERE HLP_Geocoder B2B Download Center



B2B Download Center

Account Name:
HERE

HERE DATA PRODUCTS
[Product Categories](#)
[Product Search](#)
[Recent Email Notifications](#)
[Recently Uploaded Files](#)
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ADMINISTRATION
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Product List

HERE Platform

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Current Release **Previous Releases**

Version	Description	
S191	HERE CLE 2.5.19 D108	Download Log
S191	HERE CLE 3.0.24 D109	Download Log
S191	HERE GFE 2.5.19 D108	Download Log
S191	HERE Geocoder 6.2.191.1 D109	Download Log
S191	HERE Geocoder Autocomplete 6.2.191.1 D109	Download Log
S191	HERE MRS 2.1.70.8 D109	Download Log
S191	HERE Reverse Geocoder 6.2.191.1 D109	Download Log
S191	HERE Routing 7.2.109 D109	Download Log
S191	HERE Geocoder 6.2.187.1 D107	Download Log
S191	HERE Geocoder Autocomplete 6.2.187.1 D107	Download Log
S191	HERE MRS 2.1.70.7 D108	Download Log
S191	HERE Reverse Geocoder 6.2.187.1 D107	Download Log
S191	HERE Routing 7.2.107 D108	Download Log
S191	HERE Traffic 6.0.114.2 D108	Download Log
S191	HERE Geocoder 6.2.179.1 D103	Download Log
S191	HERE Geocoder Autocomplete 6.2.179.1 D103	Download Log
S191	HERE MRS 2.1.70.4 D103	Download Log
S191	HERE Routing 7.2.103 D103	Download Log
S191	HERE Traffic 6.0.85.7 D103	Download Log

Figure 16: HERE HLP_Geocoder B2B Download Center

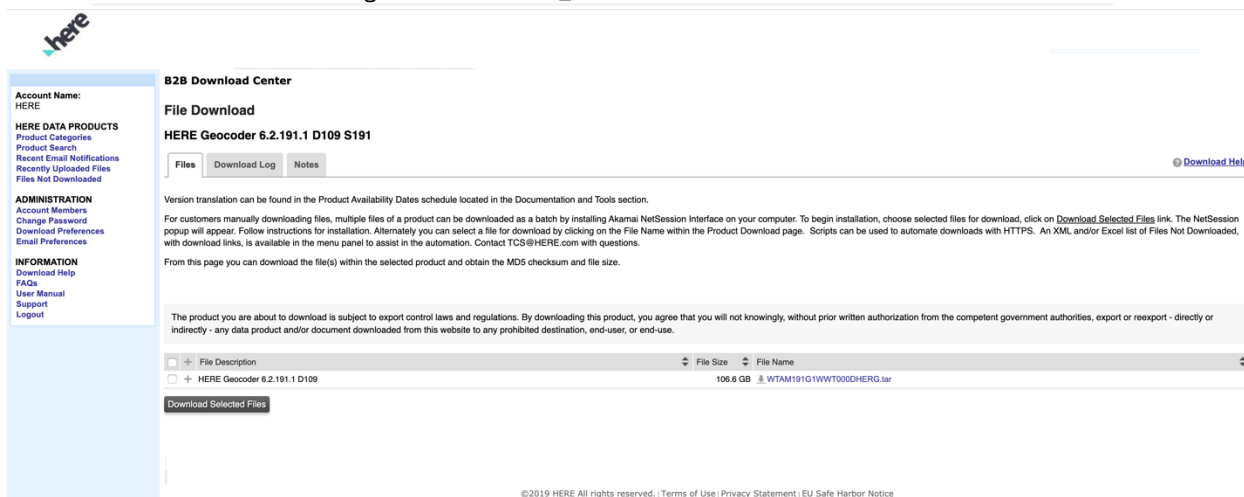


Figure 17: HERE HLP_Geocoder B2B Download Center

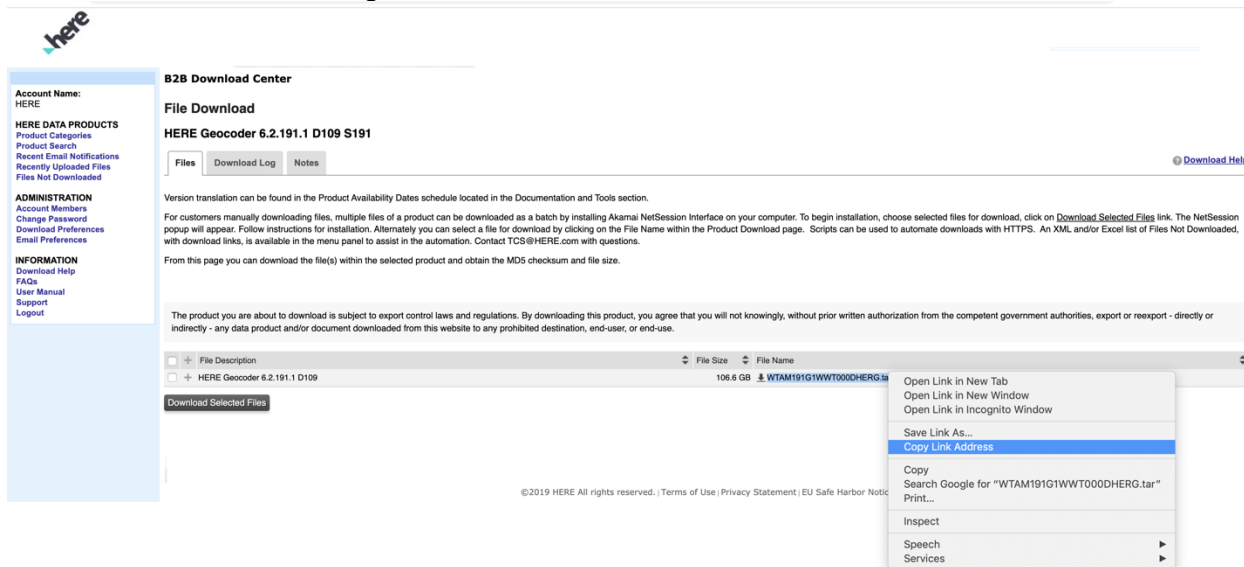


Figure 18: HERE HLP_Geocoder Map Data Configuration

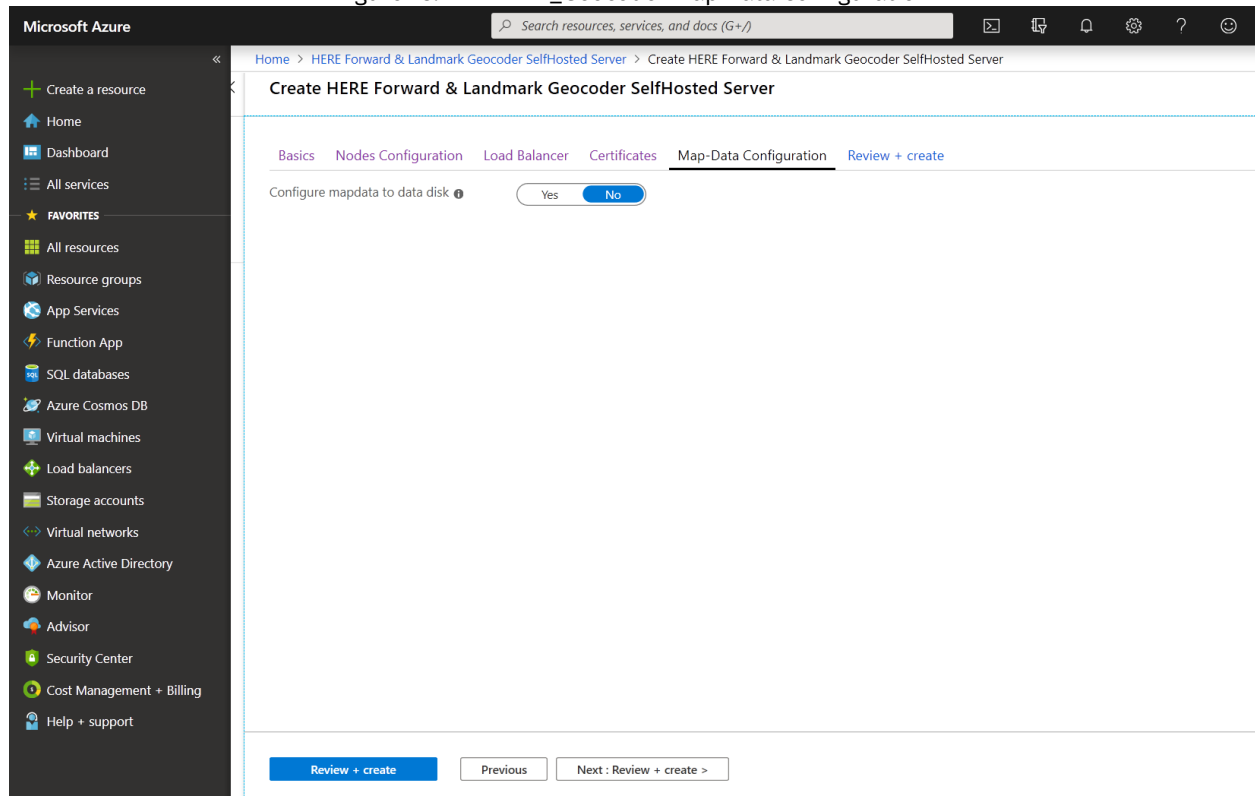
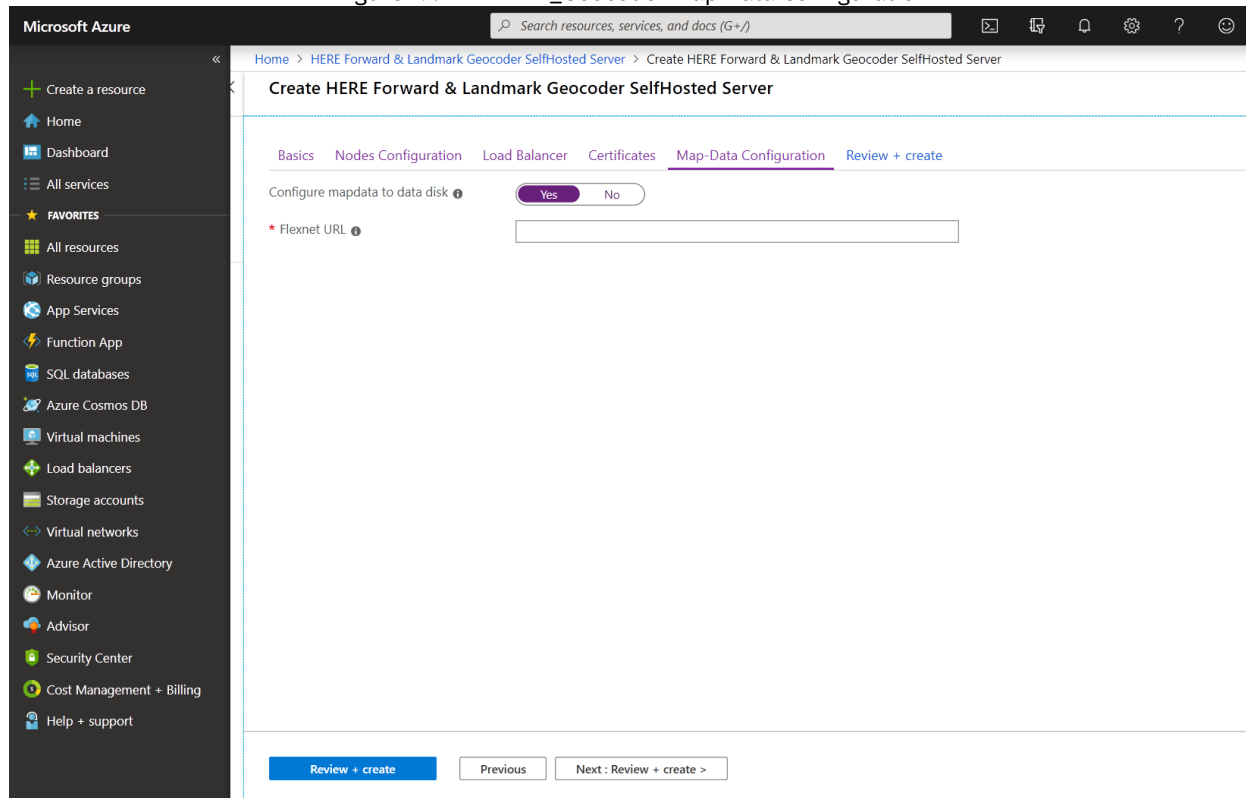


Figure 19: HERE HLP_Geocoder Map Data Configuration



Microsoft Azure

Home > HERE Forward & Landmark Geocoder Self-Hosted Server > Create HERE Forward & Landmark Geocoder Self-Hosted Server

Create HERE Forward & Landmark Geocoder Self-Hosted Server

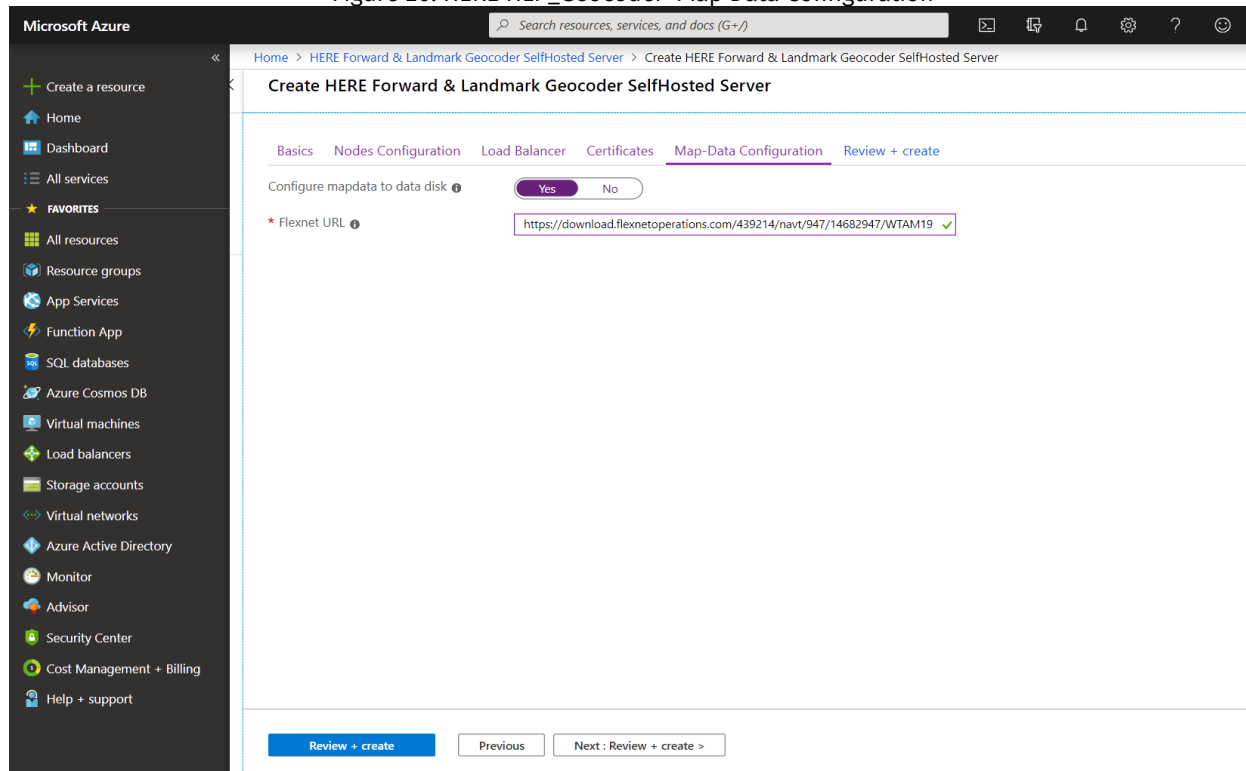
Basics Nodes Configuration Load Balancer Certificates **Map-Data Configuration** Review + create

Configure mapdata to data disk ☒ Yes ☐ No

* Flexnet URL

Review + create Previous Next: Review + create >

Figure 20: HERE HLP_Geocoder Map Data Configuration



Microsoft Azure

Home > HERE Forward & Landmark Geocoder Self-Hosted Server > Create HERE Forward & Landmark Geocoder Self-Hosted Server

Create HERE Forward & Landmark Geocoder Self-Hosted Server

Basics Nodes Configuration Load Balancer Certificates **Map-Data Configuration** Review + create

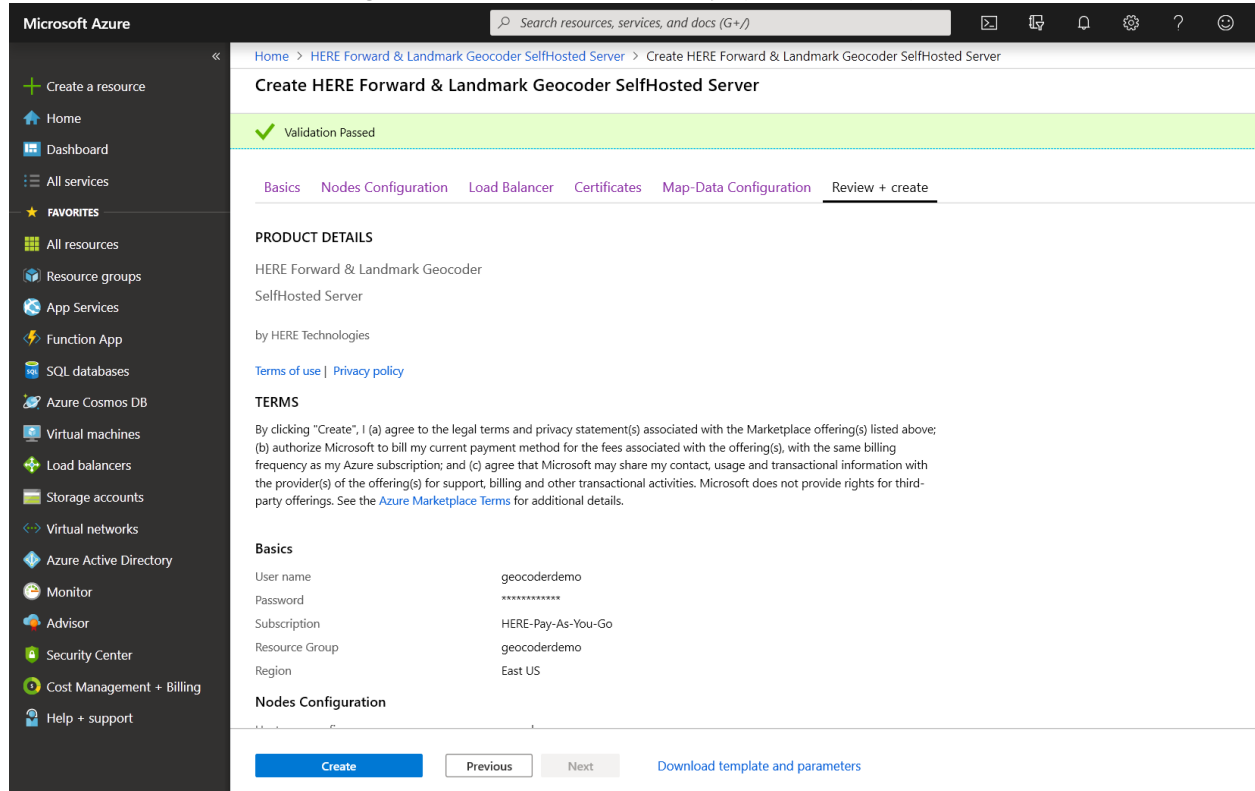
Configure mapdata to data disk ☒ Yes ☐ No

* Flexnet URL

Review + create Previous Next: Review + create >

Step 9: In the Summary section, you will be able to review your information. An automated check will take place to ensure everything is in order. Once you receive the message “Validation Passed”, click on “OK” button to start the deployment.

Figure 21: HERE HLP_Geocoder Deployment Summary



The screenshot shows the Microsoft Azure portal interface for creating a HERE Forward & Landmark Geocoder SelfHosted Server. The left sidebar contains navigation links for various Azure services. The main content area shows the deployment wizard with a 'Validation Passed' status. The 'Basics' tab is selected, displaying product details and configuration options.

Microsoft Azure Search resources, services, and docs (G+)

Home > HERE Forward & Landmark Geocoder SelfHosted Server > Create HERE Forward & Landmark Geocoder SelfHosted Server

Create HERE Forward & Landmark Geocoder SelfHosted Server

✓ Validation Passed

Basics Nodes Configuration Load Balancer Certificates Map-Data Configuration Review + create

PRODUCT DETAILS

HERE Forward & Landmark Geocoder
SelfHosted Server

by HERE Technologies

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TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the [Azure Marketplace Terms](#) for additional details.

Basics

User name	geocoderdemo
Password	*****
Subscription	HERE-Pay-As-You-Go
Resource Group	geocoderdemo
Region	East US

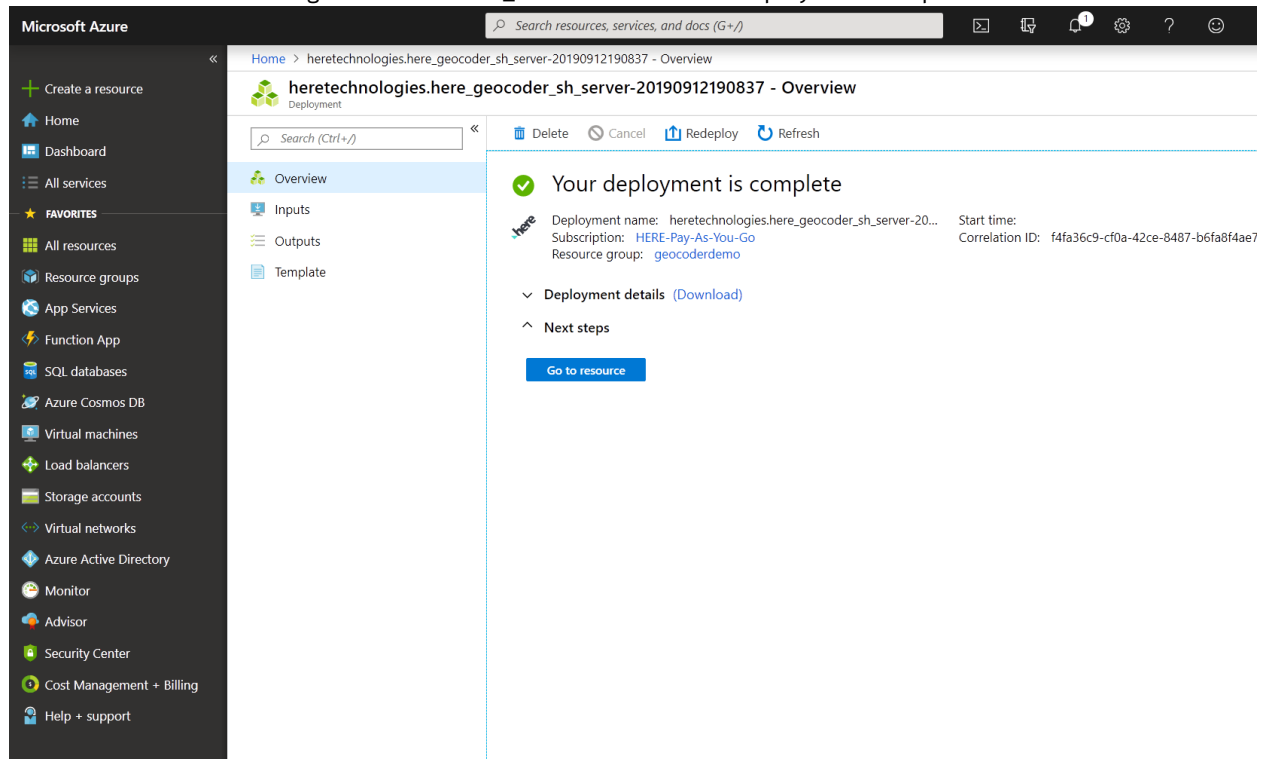
Nodes Configuration

1/1

Create Previous Next Download template and parameters

Step 10: Deployment should have started, and you will be able to see in the notification tabs deployment in progress. Once deployment is complete, you should receive the notification of the same and be able to see new resources in the resources section of your account.

Figure 22: HERE HLP_Geocoder Linux VM Deployment Complete



Chapter 3

Data Setup on Provisioned VM

Topics:

- [*Access the newly provisioned VM*](#)
- [*Download the Data Files*](#)
- [*World Map Data Setup*](#)
- [*Start Geocoder API service*](#)
- [*Commands for the HLP Geocoder*](#)
- [*Testing the installation*](#)

Access the Newly Provisioned Servers

For security reasons, VM's provisioned only carry private IP address and not Public IP addresses. To access the VM, please go to Virtual Machines section of your Azure Portal and find the jump box prefixed with string you have provided at the time of deployment of template. Use the Public IP access of the Jump Box to login to the server console. Once logged in, type the command `here_monitoring` and select option 0 to view the list of provisioned VM's. To login to any of the VM, please use ssh command provided below.

`ssh <node name> or ssh <ip address of node>`

In case you have used ssh authentication while creating the VM's, as an additional step you have to setup private access key available with you on the jump box server. You can ftp the private key file using any standard ftp tool or can use scp command provided below.

The file should be placed at path `/home/<username>/.ssh` on the jumpbox server.

`scp -i </path/name of private key file> </path/name of private key file> <jump box connection string>:~/.ssh`

On the jump box server, once you have copied the file, please execute below command to set necessary permissions.

`chmod 600 <name of private key file>`

to login to any of the nodes, if your private key filename is "id_rsa", simply use `ssh <nodename>` to connect, else use `ssh <nodename> -i <private key file name>`

Download the Data Files

Follow this section if you have selected option as "No" in the Map Data Setup section of template during deployment. If you selected "Yes", move directly to section 4.

Service files are hosted in SubscribeNet EDD (External Data Download), also known as the B2B Download

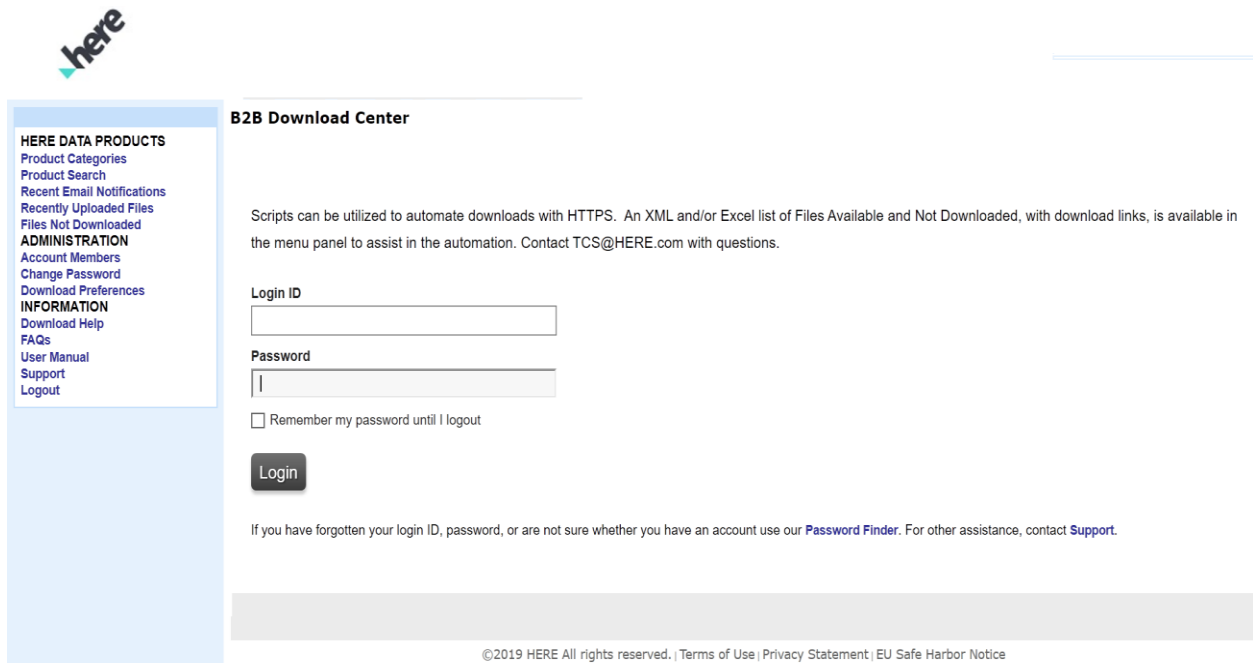
Center.

Note: To acquire credentials to access the B2B Download center, contact HERE Technical Support

(support_here_self-hosted_HLS_on-Azure@here.com).

In your browser, navigate to the B2B download center using this link:
<https://here.flexnetoperations.com/>. Enter your login credentials at the prompt and click the Login button.

Figure 23: HERE HLP_Geocoder B2B Download Center



HERE DATA PRODUCTS
Product Categories
Product Search
Recent Email Notifications
Recently Uploaded Files
Files Not Downloaded

ADMINISTRATION
Account Members
Change Password
Download Preferences

INFORMATION
Download Help
FAQs
User Manual
Support
Logout

B2B Download Center

Scripts can be utilized to automate downloads with HTTPS. An XML and/or Excel list of Files Available and Not Downloaded, with download links, is available in the menu panel to assist in the automation. Contact TCS@HERE.com with questions.

Login ID

Password

☐ Remember my password until I logout

Login

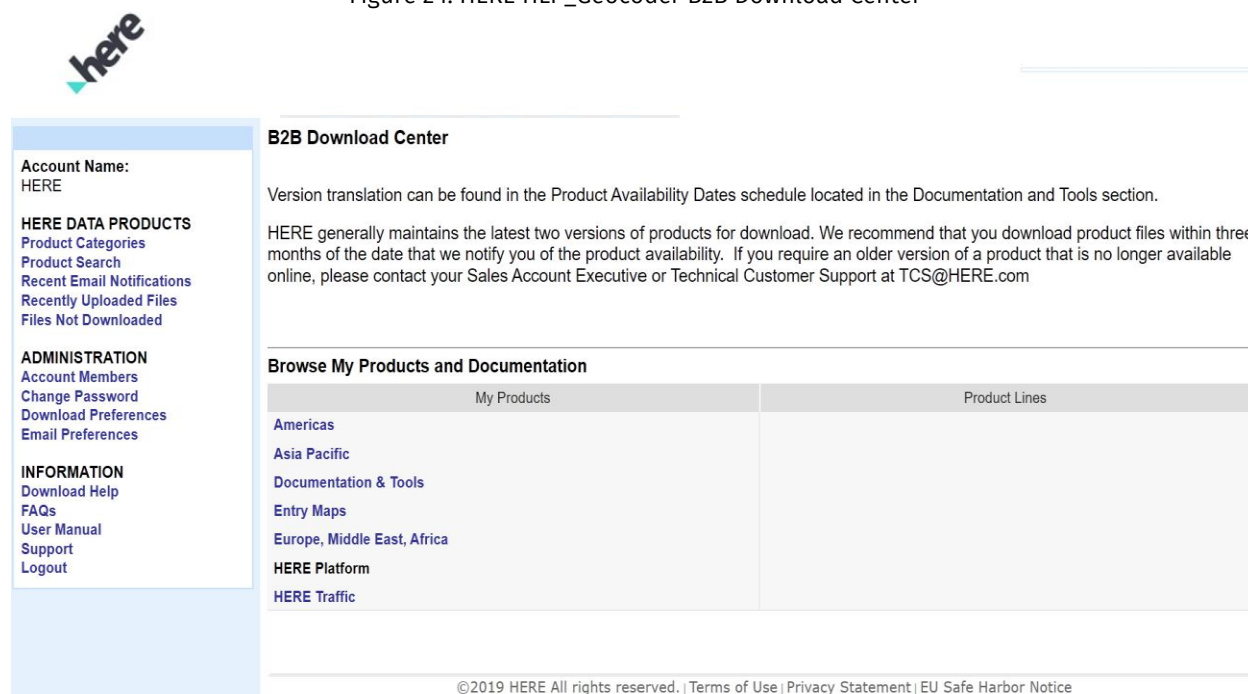
If you have forgotten your login ID, password, or are not sure whether you have an account use our [Password Finder](#). For other assistance, contact [Support](#).

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File Download

The files you need for the service are in the HERE Platform menu item. Select this item, as shown below:

Figure 24: HERE HLP_Geocoder B2B Download Center



Account Name:
HERE

HERE DATA PRODUCTS
[Product Categories](#)
[Product Search](#)
[Recent Email Notifications](#)
[Recently Uploaded Files](#)
[Files Not Downloaded](#)

ADMINISTRATION
[Account Members](#)
[Change Password](#)
[Download Preferences](#)
[Email Preferences](#)

INFORMATION
[Download Help](#)
[FAQs](#)
[User Manual](#)
[Support](#)
[Logout](#)

B2B Download Center

Version translation can be found in the Product Availability Dates schedule located in the Documentation and Tools section.

HERE generally maintains the latest two versions of products for download. We recommend that you download product files within three months of the date that we notify you of the product availability. If you require an older version of a product that is no longer available online, please contact your Sales Account Executive or Technical Customer Support at TCS@HERE.com

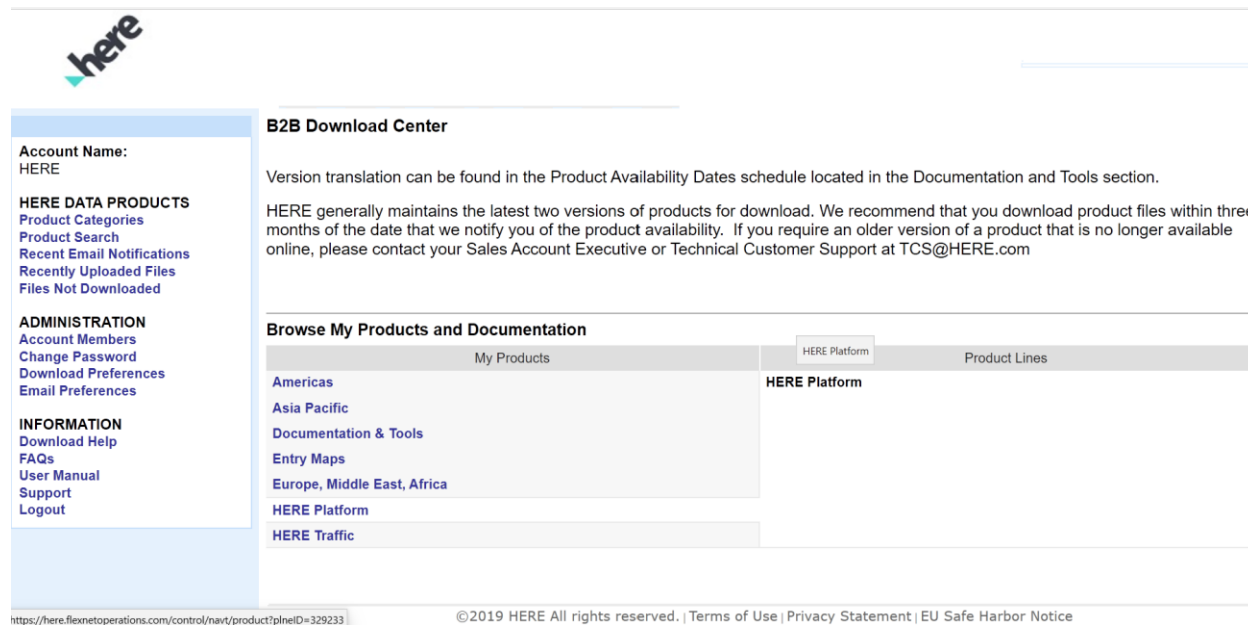
Browse My Products and Documentation

My Products	Product Lines
Americas	
Asia Pacific	
Documentation & Tools	
Entry Maps	
Europe, Middle East, Africa	
HERE Platform	
HERE Traffic	

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A submenu of download items appears on the right side of the screen. Select HERE Platform again.

Figure 25: HERE HLP_Geocoder B2B Download Center



B2B Download Center

Account Name: HERE

HERE DATA PRODUCTS

- Product Categories
- Product Search
- Recent Email Notifications
- Recently Uploaded Files
- Files Not Downloaded

ADMINISTRATION

- Account Members
- Change Password
- Download Preferences
- Email Preferences

INFORMATION

- Download Help
- FAQs
- User Manual
- Support
- Logout

Version translation can be found in the Product Availability Dates schedule located in the Documentation and Tools section.

HERE generally maintains the latest two versions of products for download. We recommend that you download product files within three months of the date that we notify you of the product availability. If you require an older version of a product that is no longer available online, please contact your Sales Account Executive or Technical Customer Support at TCS@HERE.com

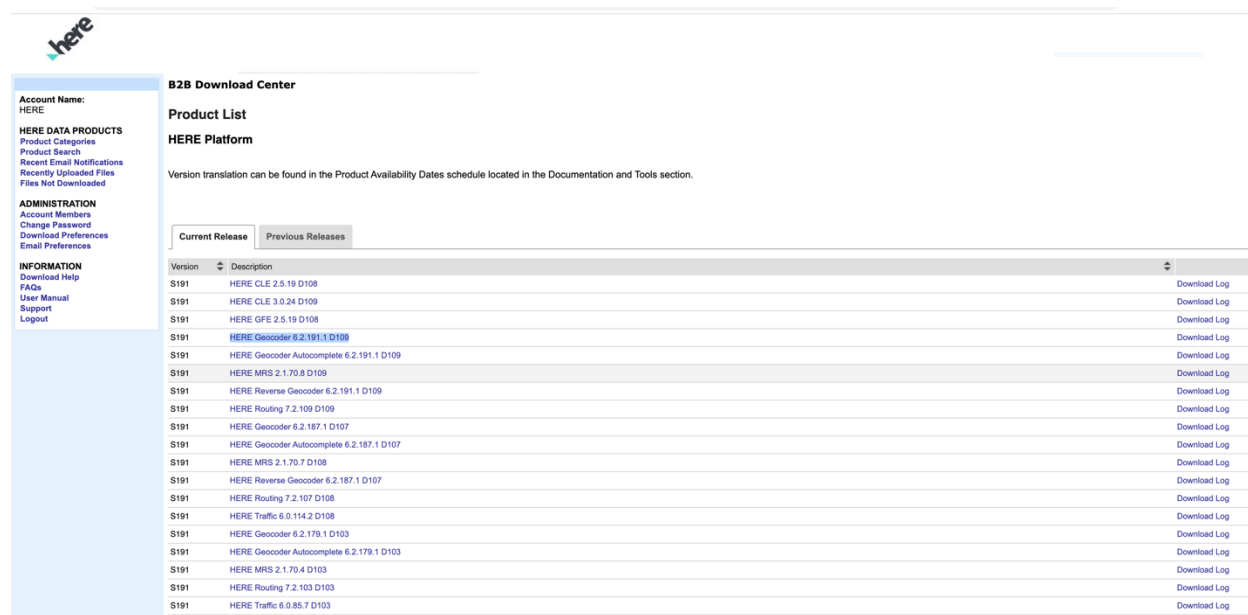
Browse My Products and Documentation

My Products	HERE Platform	Product Lines
Americas	HERE Platform	
Asia Pacific		
Documentation & Tools		
Entry Maps		
Europe, Middle East, Africa		
HERE Platform		
HERE Traffic		

<https://here.flexnetoperations.com/control/navt/product?plnID=329233> ©2019 HERE All rights reserved. | Terms of Use | Privacy Statement | EU Safe Harbor Notice

The screen now displays your download options within HERE Platform. For the HLP Geocoder, select HERE Geocoder 6.2.191.1 D109. Please ensure you download this version only to ensure compatibility with the VM.

Figure 26: HERE HLP_Geocoder B2B Download Center



B2B Download Center

Account Name: HERE

HERE DATA PRODUCTS

- Product Categories
- Product Search
- Recent Email Notifications
- Recently Uploaded Files
- Files Not Downloaded

ADMINISTRATION

- Account Members
- Change Password
- Download Preferences
- Email Preferences

INFORMATION

- Download Help
- FAQs
- User Manual
- Support
- Logout

Product List

HERE Platform

Version translation can be found in the Product Availability Dates schedule located in the Documentation and Tools section.

Current Release Previous Releases

Version	Description	Download Log
S191	HERE CLE 2.5.19 D108	Download Log
S191	HERE CLE 3.0.24 D109	Download Log
S191	HERE GFE 2.5.19 D108	Download Log
S191	HERE Geocoder 6.2.191.1 D109	Download Log
S191	HERE Geocoder Autocomplete 6.2.191.1 D109	Download Log
S191	HERE MRS 2.1.70.8 D109	Download Log
S191	HERE Reverse Geocoder 6.2.191.1 D109	Download Log
S191	HERE Routing 7.2.109 D109	Download Log
S191	HERE Geocoder 6.2.187.1 D107	Download Log
S191	HERE Geocoder Autocomplete 6.2.187.1 D107	Download Log
S191	HERE MRS 2.1.70.7 D108	Download Log
S191	HERE Reverse Geocoder 6.2.187.1 D107	Download Log
S191	HERE Routing 7.2.107 D108	Download Log
S191	HERE Traffic 6.0.114.2 D108	Download Log
S191	HERE Geocoder 6.2.179.1 D103	Download Log
S191	HERE Geocoder Autocomplete 6.2.179.1 D103	Download Log
S191	HERE MRS 2.1.70.4 D103	Download Log
S191	HERE Routing 7.2.103 D103	Download Log
S191	HERE Traffic 6.0.85.7 D103	Download Log

Once you have selected the appropriate package, the screen lists all the files you need to install the HLP

Geocoder. Service downloads are created in split tar files that are a maximum of 2 Gigabytes in size, so most have multiple files that need to be downloaded.

Download via Browser:

At this screen, click the appropriate download button for each file shown:

- High Speed Download: uses Fast and Secure Protocol (FASP), an alternative to Transmission Control

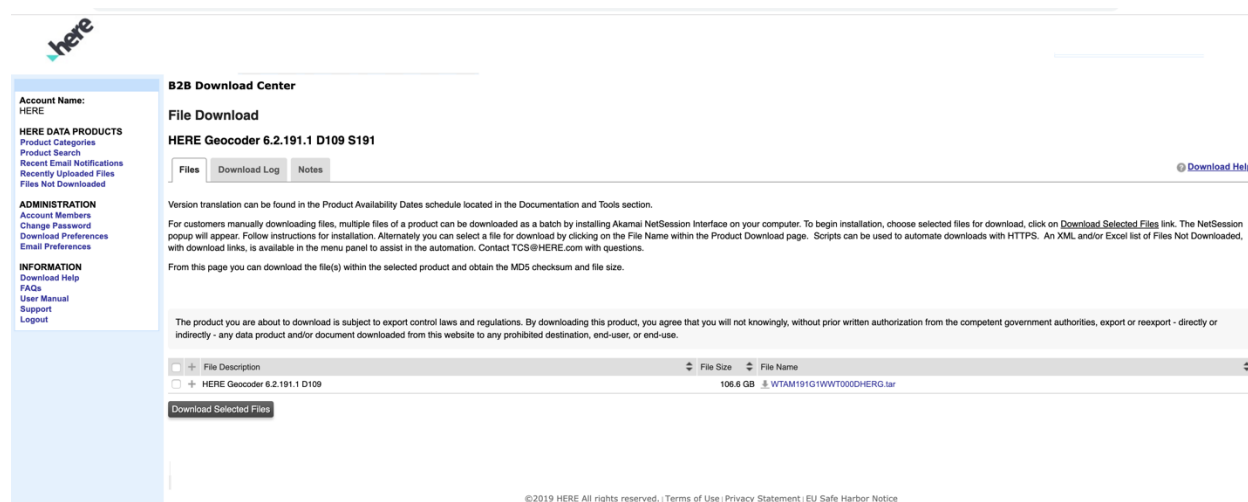
Protocol (TCP), which accelerates bulk data transfer.

- FTP Download: uses File Transfer Protocol (FTP) to download files.

- HTTP Download: downloads files via HTTP. This is the slowest of the download protocols, and takes

approximately twice as long as the FTP download.

Figure 27: HERE HLP_Geocoder B2B Download Center



Download via Command Line:

You may instead wish to use Linux to download files via command line, using the `wget` command. If that is the case, you can save the appropriate URL for each file download by right-clicking the download button and choosing Copy Link Location. You have to paste the url to the command line in quotation marks and also use the `-O` option to specify the file name. Just like shown below:

```
wget "pasted_url" -O WTAM191F0WWT000DHERV.tar
```

Extract downloaded file

```
tar -xvf WTAM191F0WWT000DHERV.tar
```

Use below command to unzip the zip file

```
unzip HERE_*
```

To extract all smaller archives named from `.tgz.split.aa` until the last one that exists `.tgz.split.zz`.

You can use this command but be sure you have enough disc space:

```
[maptp@<host> <user ID>]$ cat HERE-*.tgz.* | tar -xz
```

Once this command has completed, you will have an additional subdirectory in your current directory. This subdirectory will contain the files that you need to use to setup World Map data.

World Map Data Setup

1. In the directory `/datadrive/disk1/mapdata`, copy the map packed data files `RGC_2019Q1.001.RR.20190327.tgz` and `UDM_2019Q1.001.RR.20190327.tgz` to this directory and unpack it.
2. To unpack the tar file, you can use command `sudo tar -xvf <file name>`.
3. Make sure you have the following directories at `/datadrive/disk1/mapdata`:

```
RGC_2019Q1.033.RR.20190919
FGC_2019Q1.033.RR.20190919
UDM_2019Q1.033.RR.20190919
```
4. Execute command `sudo chown -Rh navteq:navteq *` to ensure correct permissions are set.
5. Create soft links with map data and config using following commands

```
sudo ln -s /datadrive/disk1/mapdata/FGC_2019Q1.033.RR.20190919
/var/opt/Navteq/share/search/geocoder/
```



```
sudo ln -s /datadrive/disk1/mapdata/UDM_2019Q1.033.RR.20190919  
/var/opt/Navteq/share/search/geocoder/
```

```
sudo ln -s /datadrive/disk1/mapdata/RGC_2019Q1.033.RR.20190919  
/var/opt/Navteq/share/search/geocoder/
```

Note: It is not recommended to use map from a different release. Use only the in guide recommended map for each HLP Geocoder release.

Starting the HLP Geocoder

1. First start the spatial index component ME2 by invoking:

```
/opt/Navteq/bin/me2repository-6.2.179.1 start
```

2. Verify the ME2-log file for a successful startup:

```
tail -f /var/opt/Navteq/log/search-search6-aggregation-service\ -6.2.179.1/me2repository-  
6.2.179.1@<host>-console.log3.
```

The ME2 component starts within a few minutes and you will see the message

-----UP AND RUNNING ----- in the log file.

Note: The ME2 service needs to be up and running before you start the Geocoder Service.

3. Start the Geocoder API by invoking:

```
/opt/Navteq/bin/search-search6-aggregation-service-6.2.179.1 start
```

4. Verify the successful startup of Geocoder API with the following command.

```
/opt/Navteq/bin/search-search6-aggregation-service-6.2.179.1 status
```

The output should look similar to:

```
Trying to switch to user navteq context via sudo...  
Status of search-search6-aggregation-service-6.2.179.1:  
PID 20689 (process watcher) running: /bin/bash  
PID 20698 (search-search6-aggregation-service-6.2.179.1) running:  
/usr/java/jre1.8.0_31/bin/  
Java
```

5. View the log output produced by Tomcat during startup:

```
tail -f /var/opt/Navteq/log/search-search6-aggregation-service-6.2.179.1/  
search-search6-aggregation-service-6.2.179.1@<host>-console.log
```

The service is up and running when the following message is printed

```
org.apache.catalina.startup.Catalina start
INFO: Server startup in 335986 ms
```

Commands for the HLP Geocoder

The following Table of Commands contains the commands that are used to check the status of the service, start it, restart it, or stop it.

Description	Command
Start the service	<code>/opt/Navteq/bin/search-search6-aggregation-service-6.2.179.1 start</code>
Restart the service	<code>/opt/Navteq/bin/search-search6-aggregation-service-6.2.179.1 restart</code>
Check the status of the service	<code>/opt/Navteq/bin/search-search6-aggregation-service-6.2.179.1 status</code>
Stop the service	<code>/opt/Navteq/bin/search-search6-aggregation-service-6.2.179.1 stop</code>
Start the spatial index	<code>/opt/Navteq/bin/me2repository-6.2.179.1 start</code>
Check the status of the spatial index	<code>/opt/Navteq/bin/me2repository-6.2.179.1 status</code>
Restart the spatial index	<code>/opt/Navteq/bin/me2repository-6.2.179.1 restart</code>
Stop the spatial index	<code>/opt/Navteq/bin/me2repository-6.2.179.1 stop</code>

Testing the Installation

Once the HLP Geocoder is installed, you can verify that the installation is correct by executing these test cases.

In the URL, <host> and <port> are the hostname and port number of the Load Balancer created during the deployment.

For better readability URL parameters haven't been URL encoded.

1. Version Information

```
# wget -O - "http://localhost:8080/6.2/version.txt"
```

Geocoder API version information

2. Health Check

```
# wget -O - "http://localhost:8080/6.2/isalive.html"
```

HTTP 200 response listing the status of the different components

3. Geocode freeform

```
# wget -O - "http://localhost:8080/6.2/geocode.xml?\  
searchtext=425 W Randolph Chicago" | xmllint --format -
```

Address result with the following label:

```
<Label>425 W Randolph St, Chicago, IL 60606, United States<Label>
```

4. Geocode qualified

```
# wget -O - "http://localhost:8080/6.2/geocode.xml?\  
 housenumber=425&street=W Randolph&city=Chicago" | xmllint --format -
```

Address result with the following label:

```
<Label>425 W Randolph St, Chicago, IL 60606, United States<Label>
```

5. Search Landmark Geocoding

```
# wget -O - "http://localhost:8080/6.2/search.xml?\  
searchtext=Ferry Building, San Francisco" | xmllint --  
format -
```

Place result:

```
<Name>Ferry Building</Name>  
<Label>The Embarcadero, San Francisco, CA 94111, United States</Label>
```

6. Canada postal code retrieval

```
# wget -O - "http://localhost:8080/6.2/geocode.xml?\  
searchtext=1 Rue McGill Montreal, QC, H2Y" | xmllint --  
format -
```

Address result with 100% postal code match score:

```
<MatchQuality>  
<PostalCode>1.0</PostalCode>  
<Label>1 Rue McGill, Montréal, QC H2Y 4A3, Canada</Label>  
<PostalCode>H2Y 4A3</PostalCode>
```

7. Reverse geocode retrieveAreas

```
# wget -O - "http://localhost:8080/6.2/reversegeocode.xml?\  
prox=50.1115,8.6805&mode=retrieveAreas" | xmllint --format -
```

Address result:

```
<MatchLevel>district</MatchLevel>  
<Label>Altstadt, Frankfurt am Main, Hessen, Deutschland</Label>
```



Chapter 4

Monitoring Map Data Setup on Provisioned VM

Topics:

- [Access the Newly Provisioned VM](#)
- [Here Monitoring Tool](#)

Access the Newly Provisioned VM

For security reasons, VM's provisioned only carry private IP address and not Public IP addresses. To access the VM, please go to Virtual Machines section of your Azure Portal and find the jump box prefixed with string you have provided at the time of deployment of template. Use the Public IP access of the Jump Box to login to the server console. Once logged in, type the command `here_monitoring` and select option 5 to view the list of provisioned VM's. To login to any of the VM, please use `ssh` command provided below.

Ssh <node name>

Here Monitoring Tool

Once you have logged in to jump box server, type command `here_monitoring` and press any option between 0-5 to see respective details. For each operation, you will be shown a list of available VM's. You can either select 0 to view the details of all VM's together or choose the number of specific VM for which you wish to see the details. Once deployment has been completed, you can test the API's responses by using options 3 and 4. Use option 5 to quit the tool.

Figure 28: HERE HLP_Geocoder Deployment Monitoring Tool

```
.....
                Copyright 2019 HERE Europe B.V.
            Installation & API health checker for Backend Pool VMs
.....
0) List Nodes
1) Deployment Status
2) Deployment Log
3) API 'Version'
4) API 'geocodeSearchText'
5) Exit
select option [0-5], followed by [ENTER] : 0
.....
geocd-node0 - 10.0.0.7
geocd-node1 - 10.0.0.6
geocd-node2 - 10.0.0.9
geocd-node3 - 10.0.0.8
geocd-node4 - 10.0.0.10
.....
Do you want to perform more operation [Y/n] : 
```

Figure 29: HERE HLP_Geocoder Deployment Monitoring Tool

```

-----
                Copyright 2019 HERE Europe B.V.
            Installation & API health checker for Backend Pool VMs
-----
0) List Nodes
1) Deployment Status
2) Deployment Log
3) API 'Version'
4) API 'geocodeSearchText'
5) Exit

select option [0-5], followed by [ENTER] : 1
-----
0) All
1) geocd-node0
2) geocd-node1
3) geocd-node2
4) geocd-node3
5) geocd-node4
Select All[0]/Node[1..] for details, followed by [ENTER] : 0
-----
====> [geocd-node0]
-----
Content-type: text/html

geocd-node0 :: Thu Sep 12 13:50:54 UTC 2019

Configure HTTP TLS      [Configure SSL Certificates      ] [OK]
ReverseGeocoder API Config [Update server.xml, server.ini File ] [OK]
Install Monitoring API   [Install here_monitoring Script     ] [OK]
Wget MapData tar        [Download tar file from flexnet     ] [In-Progress]
Extract Tar              [Extract downloaded flexnet tar     ] [Pending]
Map Data Setup           [Setup mapdata into /var/mapdata    ] [Pending]
Service Start           [Start search aggregation Service   ] [Pending]
-----
  
```

Figure 30: HERE HLP_Geocoder Deployment Monitoring Tool

```

[geocoderdemo@geocd-jumpbox ~]$ here_monitoring
-----
                Copyright 2019 HERE Europe B.V.
            Installation & API health checker for Backend Pool VMs
-----
0) List Nodes
1) Deployment Status
2) Deployment Log
3) API 'Version'
4) API 'geocodeSearchText'
5) Exit

select option [0-5], followed by [ENTER] : 2
-----
0) All
1) geocd-node0
2) geocd-node1
3) geocd-node2
4) geocd-node3
5) geocd-node4
Select All[0]/Node[1..] for details, followed by [ENTER] : 0
-----
====> [geocd-node0]
-----
Content-type: text/html

[12092019-13:50:54] Begin execution of script extension on geocd-node0
[12092019-13:50:54] geocd-node0 not found in /etc/hosts
[12092019-13:50:54] hostname geocd-node0 added to /etc/hosts
[12092019-13:50:54] Option A set
[12092019-13:50:54] Option S set
[12092019-13:50:54] Option K set
[12092019-13:50:54] Option U set
[12092019-13:50:54] [configure_xinetd] installing xinetd package
[12092019-13:52:36] [configure_xinetd] installing service /etc/xinetd.d/here_logs
[12092019-13:52:36] [configure_xinetd] restarting xinetd service
[12092019-13:52:36] [install_monitoring_api] /usr/local/bin/here_monitoring installed
[12092019-13:52:36] [add_firewall_rules] Adding firewall rules
[12092019-13:52:38] [add_firewall_rules] Adding port redirection from 80->8080 & 443->8443
[12092019-13:52:41] [add_firewall_rules] firewall rules added for port 80/tcp & 443/tcp
[12092019-13:52:41] [add_firewall_rules] 80/tcp 443/tcp 8080/tcp 65000/tcp 65001/tcp
[12092019-13:52:41] [format_data_disks] starting
  
```

Figure 31: HERE HLP_Geocoder Deployment Monitoring Tool

```
[geocoderdemo@geocd-jumpbox ~]$ here_monitoring
-----
Copyright 2019 HERE Europe B.V.
Installation & API health checker for Backend Pool VMs
-----
0) List Nodes
1) Deployment Status
2) Deployment Log
3) API 'Version'
4) API 'geocodeSearchText'
5) Exit

select option [0-5], followed by [ENTER] : 1
-----
0) All
1) geocd-node0
2) geocd-node1
3) geocd-node2
4) geocd-node3
5) geocd-node4
Select All[0]/Node[1..] for details, followed by [ENTER] : 0
-----
====> [geocd-node0]
-----
Content-type: text/html

geocd-node0 :: Thu Sep 12 13:50:54 UTC 2019

Configure HTTP TLS      [Configure SSL Certificates      ] [OK]
ReverseGeocoder API Config [Update server.xml, server.ini File ] [OK]
Install Monitoring API  [Install here_monitoring Script    ] [OK]
Wget MapData tar        [Download tar file from flexnet     ] [OK]
Extract Tar             [Extract downloaded flexnet tar     ] [OK]
Map Data Setup          [Setup mapdata into /var/mapdata    ] [OK]
Service Start           [Start search aggregation Service    ] [OK]
-----
```

Figure 32: HERE HLP_Geocoder Linux VM Deployment Complete

```
-----
Copyright 2019 HERE Europe B.V.
Installation & API health checker for Backend Pool VMs
-----
0) List Nodes
1) Deployment Status
2) Deployment Log
3) API 'Version'
4) API 'geocodeSearchText'
5) Exit

select option [0-5], followed by [ENTER] : 3
-----
0) All
1) geocd-node0
2) geocd-node1
3) geocd-node2
4) geocd-node3
5) geocd-node4
Select All[0]/Node[1..] for details, followed by [ENTER] : 0
-----
====> [geocd-node0]
-----
Service: search-search6-aggregation-service-impl - search-search6-aggregation-service-impl, Version: 6.2.183.1
-----
Storage: 2019Q1.011.RR.20190523

JLAM191P0: [SDN, SYR, YEM]
NAAM19110: [BHS, BLZ, BMU, CAN, CRI, CUB, CYM, DOM, GTM, HND, HTI, JAM, MEX, NIC, PAN, PRI, SLV, SPM, TCA, USA, VGB, VIR]
NXAM19112: [ASM, AUS, CCK, COK, CXR, FJI, FSM, HMD, KIR, MHL, NCL, NFK, NIU, NRU, NZL, PCN, PYF, TKL, TON, TUV, VUT, WLF, WSM]
PKAM131P0: [PAK]
PZAM19104: [VNM]
PZAM19112: [BRN, CHN, GUM, IDN, JPN, KHM, KOR, LAO, MMR, MNG, MNP, MYS, PHL, PLW, PNG, PRK, SGP, SLB, THA, TLS]
RRAM19112: [BGD, BTN, IND, IOT, LKA, MDV, NPL]
SZAM18129: [ARG, CHL, FLK, SGS]
SZAM19112: [ABW, AIA, ATG, BES, BLM, BOL, BRA, BRB, COL, CUW, DMA, ECU, GLP, GRD, GUF, GUY, KNA, LCA, MAF, MSR, MTQ, PER, PRY, SUR, SWM, TTO, URY, VCT, VEN]
TAAM191E0: [ATA]
UEAM19112: [ALB, ARM, AZE, BGR, BIH, BLR, BSB, CUN, CYP, CZE, EST, GEO, GRC, HRV, HUN, KAZ, KGZ, KOS, LTU, LVA, MDA, MKD, MNE, NCY, POL, ROU, RUS, SRB, SVK, SVN, TJK, TKM, TUR, UKR, UZB]
```


Figure 33: HERE HLP_Geocoder Linux VM API Testing

```
[geocoderdemo@geocd-jumpbox ~]$ here_monitoring
-----
                        Copyright 2019 HERE Europe B.V.
                        Installation & API health checker for Backend Pool VMs
-----
0) List Nodes
1) Deployment Status
2) Deployment Log
3) API 'Version'
4) API 'geocodeSearchText'
5) Exit

select option [0-5], followed by [ENTER] : 4
-----
0) All
1) geocd-node0
2) geocd-node1
3) geocd-node2
4) geocd-node3
5) geocd-node4
Select All[0]/Node[1..] for details, followed by [ENTER] : 0
-----
====> [geocd-node0]
-----
Success : Response [
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:Search xmlns:ns2="http://www.navteq.com/lbsp/Search-Search/4">
  <Response>
    <MetaInfo>
      <Timestamp>2019-09-13T05:34:00.175Z</Timestamp>
    </MetaInfo>
    <View xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:type="ns2:SearchResultsViewType">
      <ViewId>0</ViewId>
      <Result>
        <Relevance>1.0</Relevance>
        <MatchLevel>houseNumber</MatchLevel>
        <MatchQuality>
          <City>1.0</City>
          <Street>0.9</Street>
          <HouseNumber>1.0</HouseNumber>
        </MatchQuality>
        <MatchType>pointAddress</MatchType>
      </Result>
    </View>
  </Response>
</ns2:Search>

```