Portal Quick Start Guide

Version 1.0.0 Revision 2.0.1

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1. About this Guide

This quick start guide provides information on how to create an account on the Loadbalancer.org Portal and adopt an ADC (Application Delivery Controller) appliance.

2. The Loadbalancer.org Portal

The Loadbalancer.org Portal is a cloud based platform that enables you to manage your load balancers, ADC appliances, and other network devices, from a single source. The Portal provides the following features:

- **Comprehensive ADC Dashboard** - Consolidate all your appliances in a single dashboard to effortlessly monitor their status and identify how they can be optimized.

- **Backup and Restore** - Easily back up all your ADC appliances, and securely store them for future roll-back or restoration.

- **Security** - Full end-to-end security, using state-of-the-art cryptographic technology, provides total peace of mind.

- **Task Automation** - Create automated workflows to allow common ADC tasks to be set-up and scheduled in advance.

- **User Access Control** - Complete and autonomous control over users and user-permissions within your enterprise Portal.

- **Multiple Namespaces** - Use customizable Namespaces to easily organize your ADCs into clusters and sub-clusters.

3. Account Management

To use the Portal an account must first be created. Once logged in, multiple ADC appliances from multiple vendors can be added, monitored and managed from a single point.

3.1. Account Creation

1. Navigate to the Portal home page (https://portal.loadbalancer.org) and click the **Create account** link at the bottom of the page.

2. Enter the email address to be associated with the new account and click **Create account**.

3. An activation email will be sent to the email address provided to verify and complete your registration. Open the email and click on the link inside to activate your new account.

> 🔐 **Note**   If the activation email doesn't arrive, be sure to check in any spam folders. The activation email will come from portal@loadbalancer.org.

4. To activate the new account, provide a first and last name, set a password, and then click **Next**.

5. Download the private key for the new account by clicking on the download link. Be sure to store the key in a safe place.
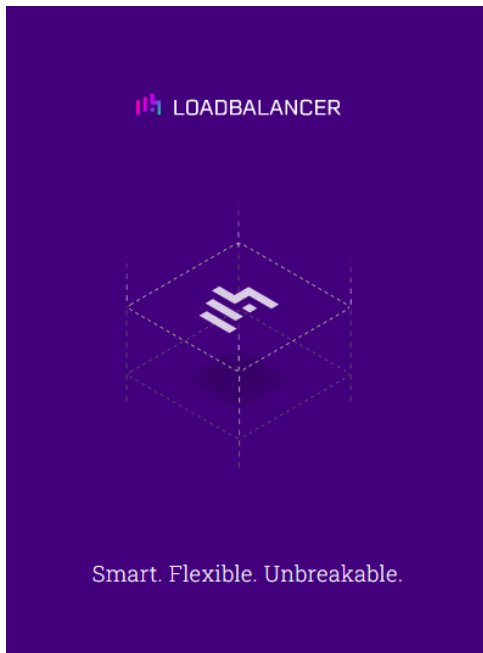
> **(①) Important**   Resetting user passwords **requires** the user's private key. It is important to store the key file in a safe location.

6. Once the account's private key has been downloaded, click the **Complete Account Activation** button to finish the process.

7. Enter the name and contact phone number for the organization and click **Next**.
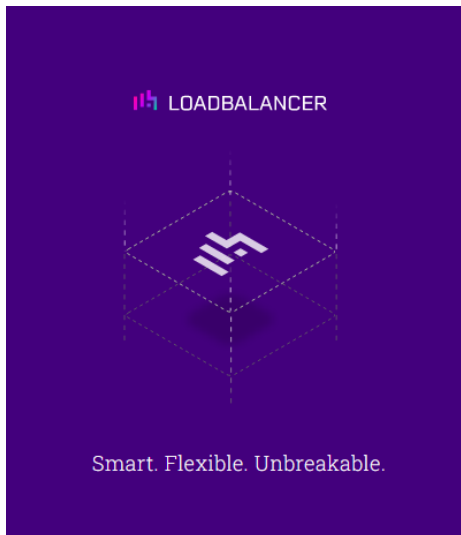
8. Download the private key for the new organization by clicking on the download link. Provide the account password when prompted.
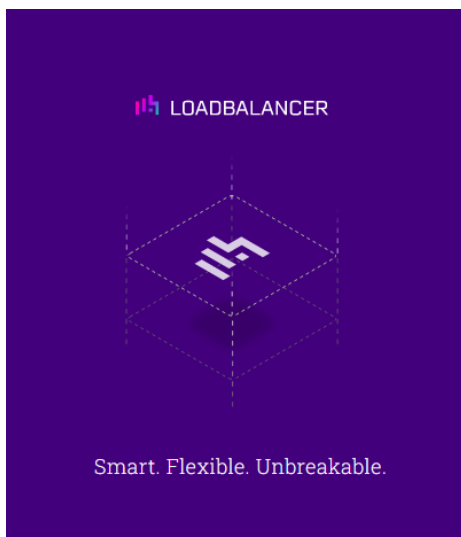
> **(!) Important**   Resetting user passwords **requires** the organizations's private key. It is important to store the key file in a safe location.

9. Once the organization's private key has been downloaded, the **Continue To Portal** button can be clicked to finish the process.
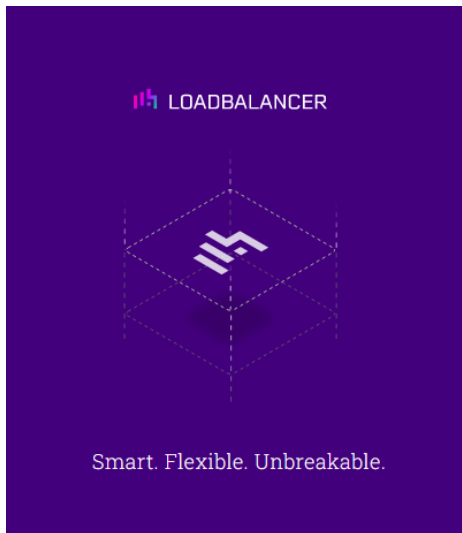
4. ADC Appliance Management

4.1. Concepts

Adding Appliances

To monitor and manage an ADC appliance it must first be added to the Portal, this is known as 'appliance adoption'. Appliances from multiple vendors can be adopted:

Vendor	Software Versions Supported	Notes
Loadbalancer.org	v8.11.1 & later	
F5	v17.0.0.1 & later	Previous versions may still work depending on features
Kemp	v7.2.55.0.21071 & later	Previous versions may still work depending on features
Citrix	v13.1-48.47 & later	Previous versions may still work depending on features

Support for additional load balancer vendors is coming soon.

Portal Connection

To monitor and manage an appliance a connection to the Portal is required. The flexible architecture allows various connection options to be used depending on the ADC vendor and topology requirements. The following features are used to provide this functionality:

- **Gateway Service** - This service can be enabled on Loadbalancer.org ADC appliances and is used to gather appliance details and pass them to a Shuttle service. Also enables appliance software updates and backups.

- **Shuttle Service** - This service can be enabled on Loadbalancer.org ADC appliances and is used to pass details of all associated ADC appliances to the Portal.

- **Vendor Specific API Calls** - Used to gather details for ADC appliances from other vendors and pass them to a Shuttle service. Also enables appliance backups.

The following connection options are supported:

Option 1 - Separate Connections for each ADC (Loadbalancer.org Appliances Only)

- Each appliance has it's own connection to the Portal.

- Appliances can be adopted via the network setup wizard, the appliance WebUI or via the Portal.
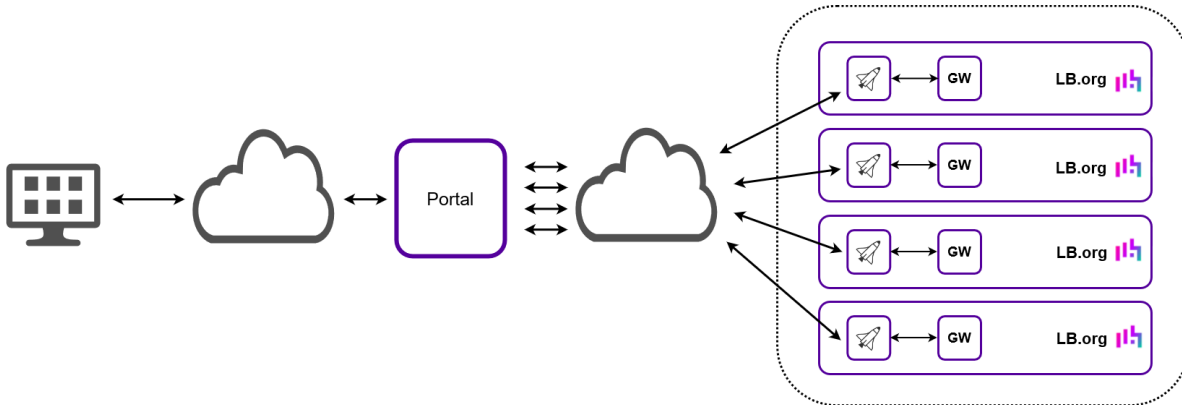
When using this option:

- The Gateway and Shuttle services on each Loadbalanacer.org appliance must be enabled

Option 2 - Shared Connection via a single ADC

- A single shared connection to the Portal is needed.

- All appliances communicate with the Portal via the Shuttle service on one of the Loadbalancer.org appliance.

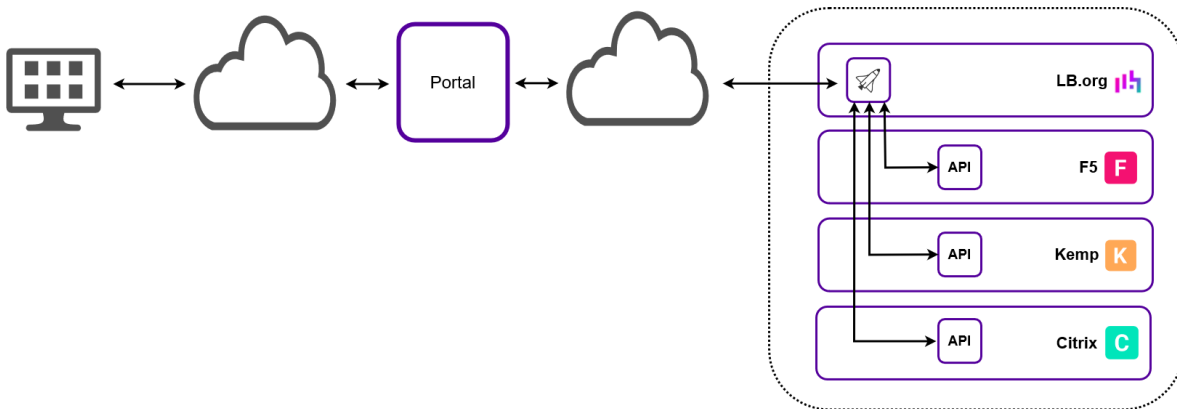- Additional ADCs must be adopted via the Portal.
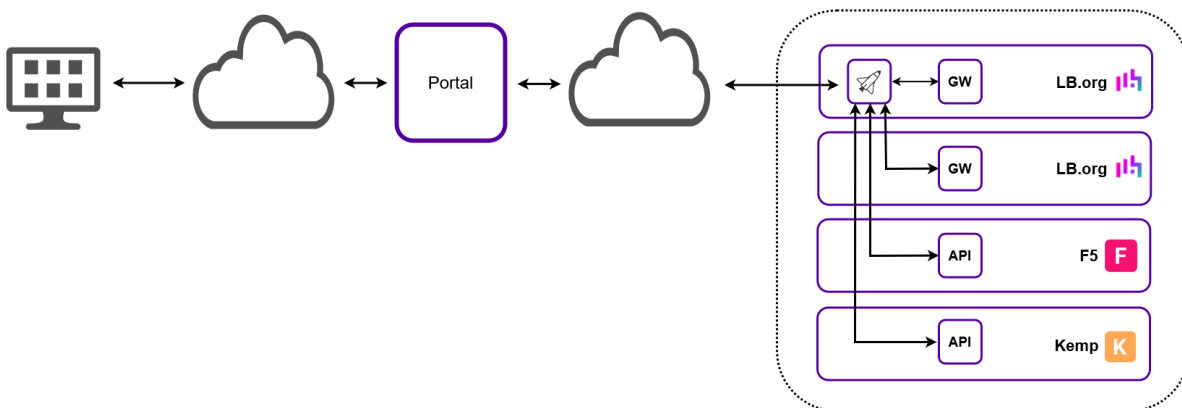
When using this option:

- The Shuttle service on one of the Loadbalancer.org appliances must be enabled.

- The Gateway service on all Loadbalancer.org appliance must be enabled.

- A user account with permissions to make API calls must be configured on each non Loadbalancer.org appliance.

Option 3 - Shared Connection via a single Dedicated ADC

- A single shared connection to the Portal is needed.

- Similar to method 2 above, but here a Loadbalancer.org ADC is dedicated to running the Shuttle and has no balancing workload.

- Useful if you prefer to separate Portal communications from load balancing workloads.

- ADCs must be adopted via the Portal.

When using this option:

- A dedicated Shuttle must be installed. This can be done via the Portal, for more details refer to Adding a Shuttle.

- The Gateway service on all Loadbalancer.org appliance must be enabled.

- A user account with permissions to make API calls must be configured on each non Loadbalancer.org appliance.

4.2. ADC Appliance Adoption

Loadbalancer.org appliances can be adopted using the following three methods:

- **Method 1** - During the Network Setup Wizard

- **Method 2** - Using the appliance WebUI

- **Method 3** - From the Portal

Appliances from other vendors must be adopted using Method 3.

Method 1 - Adopting an ADC during the Network Setup Wizard

⚙ Note	This method applies to Loadbalancer.org ADC appliances only.

When a new Loadbalancer.org appliance is deployed, the network setup wizard must first be run to configure initial network settings.

The network setup wizard also provides the option to enroll the appliance with a centralized management device

(the Portal) as shown in the third network setup screenshot (Centralized Management) below.

Configuring Initial Network Settings

After power up, the following startup message is displayed on the appliance console:

As mentioned in the text, to perform initial network configuration, login as the "setup" user at the appliance console.

Once logged in, the Network Setup Wizard will start automatically. This will enable you to configure the management IP address and other network settings for the appliance.
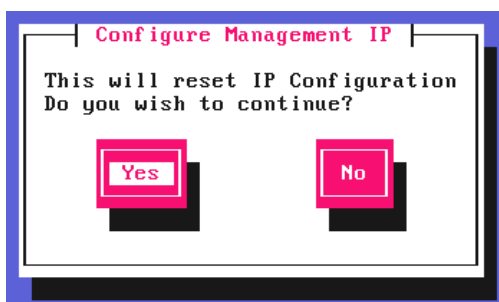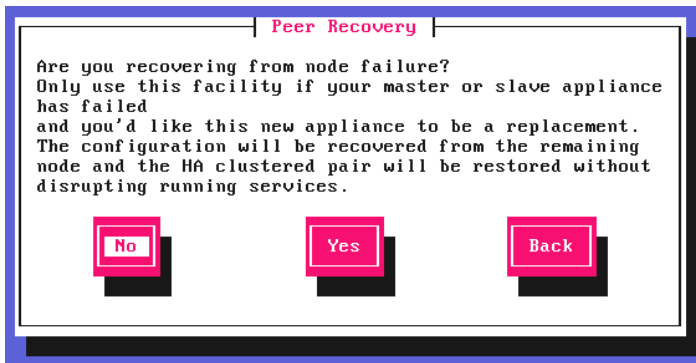
login to the console:

Username: setup
Password: setup

A series of screens will be displayed that allow network settings to be configured:

In the **Configure Management IP** screen, leave **Yes** selected and hit <ENTER> to continue.

In the **Peer Recovery** screen, leave **No** selected and hit <ENTER> to continue.

> ⚷ **Note** For more details on node recovery using this option please refer to Disaster Recovery After Node (Primary or Secondary) Failure.

In the **Centralized Management** screen, if you would like to enroll the appliance with a management server (typically **portal.loadbalancer.org**), select **Yes**, otherwise leave **No** selected, then hit <ENTER> to continue. If you select **Yes**, you'll be asked to confirm the server's details and provide login credentials at the end of this setup process.
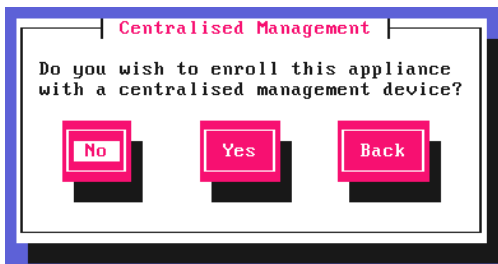
In the **Available Interfaces** screen, a list of available interfaces will be displayed, hit <ENTER> to continue.
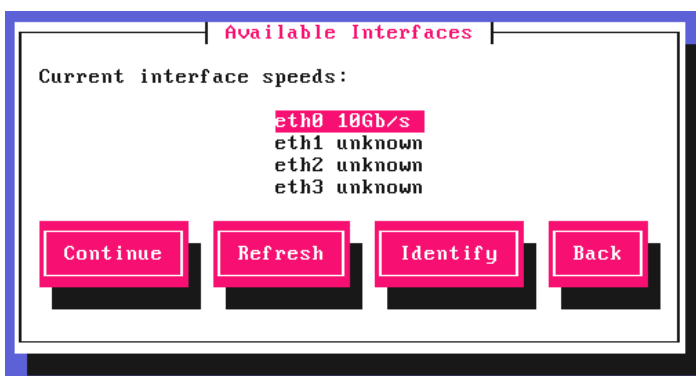
In the **Configure Bonding** screen, select **Yes** if you want to configure a bonded interface, if not leave **No** selected, then hit <ENTER> to continue.
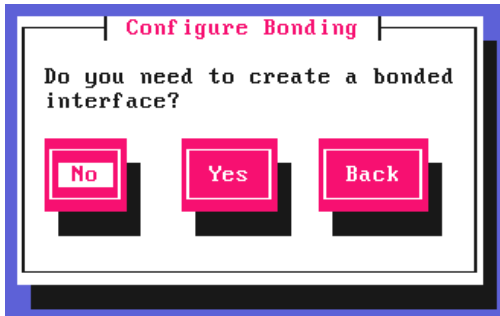
If you select **Yes**, the **Select Interfaces** screen will be displayed. Using the space bar, select the interfaces you'd like to include in the bond, select **Create** and hit <ENTER> to continue.
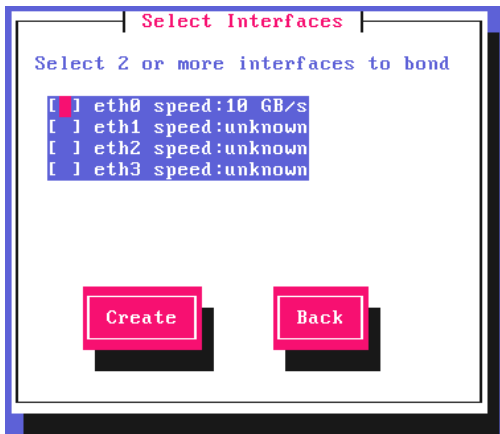
In the **Configure a VLAN** screen, select **Yes** if you want to configure a VLAN, if not leave **No** selected, then hit <ENTER> to continue.

If you select **Yes** you'll be prompted to enter a VLAN Tag ID.

In the **Configure Management IP** screen, select the interface that'll be used to manage the appliance, then hit <ENTER> to continue.
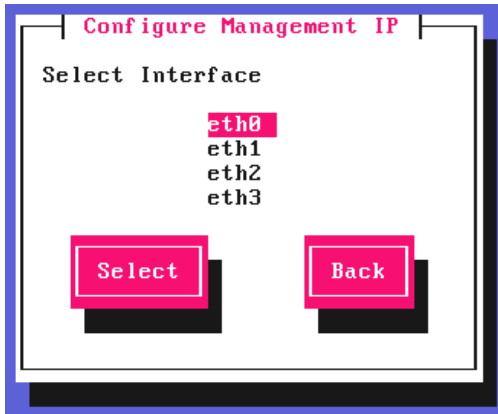
In the **Set IP address** screen, either enter the required *Static IP Address* & *CIDR Prefix* and select **Done** or select **Use DHCP**, then hit <ENTER> to continue.
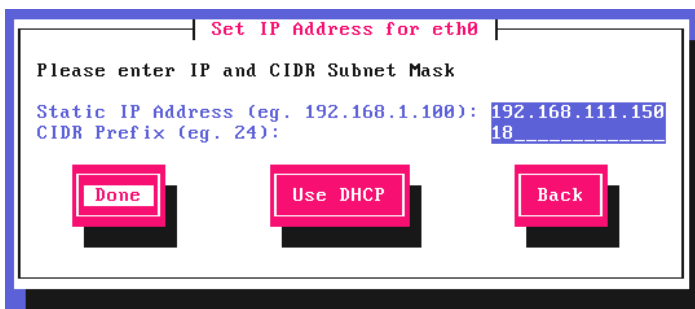
> ⚿ **Note**　　　A subnet mask such as 255.255.255.0 is not valid, in this case enter 24 instead.
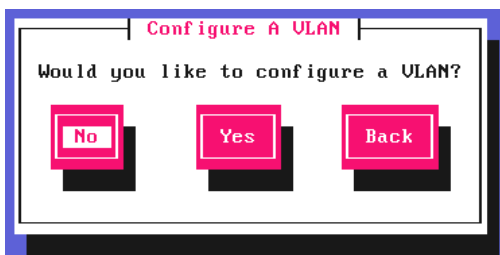
In the **Configure Default Gateway** screen, enter the required *Default Gateway IP Address*, select **Done** and hit <ENTER> to continue.
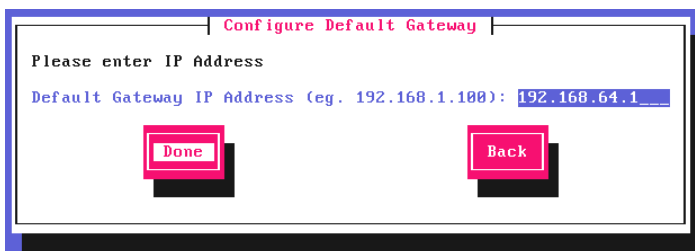
In the **Configure DNS Servers** screen, configure the required DNS server(s), select **Done** and hit <ENTER> to continue.
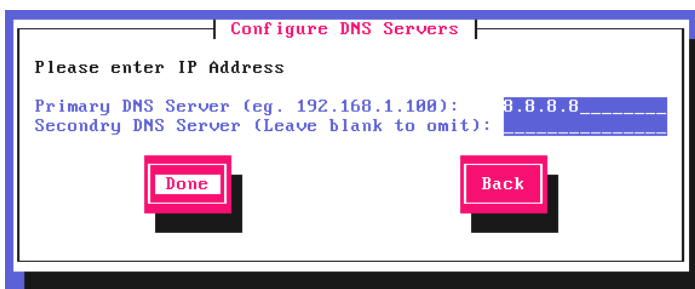
In the **Set Password** screen, hit <ENTER> to continue.

Enter the *Password* you'd like to use for the **loadbalancer** WebUI user account and the **root** Linux user account. Repeat the password, select **Done** and hit <ENTER> to continue.
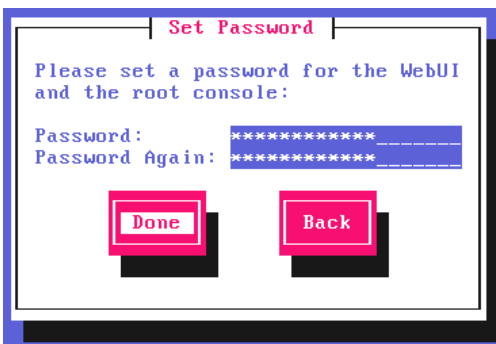
If you selected **Yes** when asked if you want to enroll for Centralized Management, you'll now be prompted for the details. Default values for the *Host* and *Port* are set and can be changed if required. Enter the *Username* and *Password* for the management server account you'd like the appliance to be associated with, select **Done** and hit <ENTER> to continue.
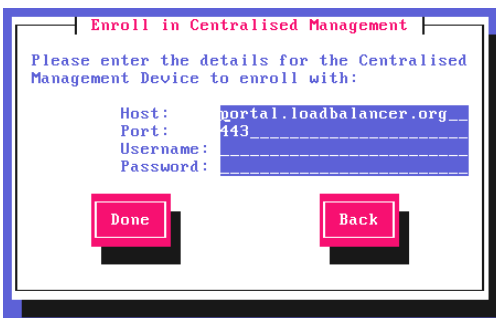
In the **Summary** screen, check all settings. If everything is correct, leave **Configure** selected and hit <ENTER> to continue. All settings will be applied. If you need to change a setting, use the **Back** button.

Once the configuration has been written, the **Configuration Complete** screen and message will be displayed. Click **OK** to exit the wizard and return to the command prompt.

Now follow the steps in Completing the Adoption Process below.

Method 2 - Adopting an ADC using the Appliance WebUI

> ♟ **Note**   This method applies to Loadbalancer.org ADC appliances only.

A Loadbalancer.org appliance can also be adopted using the appliance's WebUI. The Portal connection details must be configured first, then the adoption process can be started.

Step 1 - Configure Portal Connection Details

1. Using the WebUI, navigate to: *Local Configuration > Portal Management*.

2. To enable communication with the Portal, enable (check) the *Gateway Enabled* and *Shuttle Enabled* checkboxes.

3. To view or change the hostname/IP address and port of the Portal click **[Advanced]**.

> ♟ **Note**   In most cases the default values for *Hostname* and *Port* do not need to be changed.

4. Click **Update**.

5. To apply the new settings, the Gateway and Shuttle services must be restarted. This can be done using the buttons in the "Commit changes" box at the top of the screen.

Step 2 - Add the Appliance to the Portal (Adopt)

1. Enter the *Portal Email* & *Portal Password* for the account you'd like the appliance to be associated with.

2. Click **Begin Adoption**.

Now follow the steps in Completing the Adoption Process below.

Completing the Adoption Process

1. In the Portal, using the *Services* dropdown at the top of the page, select **ADCs**.

2. Using the menu on the left, select *Shuttle Management*, the Shuttle for the appliance added will appear in the list.

3. Click the **Adopt** button for the new Shuttle, enter the credentials for the appliance and click **Submit**.

4. Using the menu on the left, select *List*, the new appliance will appear in the ADC list.

Method 3 - Adopting an ADC From the Portal

🔒 Note	This method applies to all ADC vendors.

🔒 Note	There must already be an accessible Shuttle in the same subnet as the appliance being added. To add a dedicated Shuttle, please refer to Adding a Shuttle.

Step 1 - Prepare the Appliance for Adoption

Loadbalancer.org Appliances:

1. Using the WebUI, navigate to *Local Configuration > Portal Management*.

2. Enable (check) the *Gateway Enabled* checkbox.

3. Click **Update**.

4. Restart the Gateway and Shuttle services using the restart buttons in the "Commit changes" box at the top of the screen.

All other Appliance Vendors:

1. Follow the manufacturers instructions to add a user account that has permissions to make API calls.

2. Note the user credentials as these will be needed when adopting the appliance in the Portal.

Step 2 - Adopt the Appliance

1. In the Portal, using the *Services* dropdown at the top of the page, select **ADCs**.

2. In the ADCs menu, select *List* then click the **Add ADC** button.

Loadbalancer Enterprise

Loadbalancer Enterprise is designed to be clever, not complex, with flexible deployment and payment options. These fully featured ADCs deliver the highest throughput and unmatched reliability for critical workloads.

▭ Warp   ⊕ Backup   ⟳ Update   ⚠ Security insights   **Add**

Loadbalancer Endurance

Loadbalancer Endurance is a next-generation load balancer, built for a cloud-native world. Currently in open beta, Endurance will become a fully commercial offering by the end of 2024.   **Add**

F5 BIG-IP

F5 is a multi-cloud application services and security company, committed to bringing a better digital world to life. Although they have diversified their product range, their BIG-IP load balancer remains a core part of their offering.   **Add**

▭ Warp   ⊕ Backup   ⚠ Security insights

3. Click **Add** next to the type of ADC to be added.

Loadbalancer Enterprise

● **ADC Login details**

Shuttle*

Loadbalancer Shuttle (192.168.111.176/18)   ⌄   ⓘ

● API configuration details
● ADC management details
● Additional information (Optional)
● Ready to connect

4. Using the *Shuttle* dropdown, select the Shuttle the appliance should use to communicate with the Portal. If there is only one available Shuttle, this will be greyed out and selected automatically.

5. Click **Next**.

API configuration details

Username*

> loadbalancer   ⓘ

Password*

> ••••••••••••   ⓘ

Address*

> 192.168.111.136   ⓘ

Port*

> 9000   ⇅   ⓘ

6. Enter the *Username* and *Password* for an appliance user account that has permissions to make API calls.

7. Enter the *IP address* of the appliance being added.

8. Leave the port set to the default value.

9. Click **Next**.

ADC management details

Label*

> ADC2   ⓘ

Address*

> 192.168.111.136   ⓘ

Port*

> 9443   ⇅   ⓘ

10. Enter an appropriate *Label* (name) for the appliance.

11. Leave the port set to the default value.

12. Click **Next**.

13. Enter any required *Notes* and *Tags* to describe the appliance and click **Next**.

14. Verify all settings, these can be changed if needed using the relevant **Edit** option.

15. Click **Submit** - the adopted appliance should appear in the list.

4.3. Adding a Shuttle

When using method 3 for the Portal Connection, a dedicated Shuttle is required. This is provided via a Loadbalancer.org VA which must be installed in your local Hypervisor environment. The appliance can be downloaded from the Portal as described below.

1. In the Portal, using the *Services* dropdown at the top of the page, select **ADCs**.

2. In the ADCs menu, select *Shuttle Management* then click the **Add Shuttle** button.

3. Select the relevant Hypervisor and click the **Download** button at the bottom of the page.

4. Once the download is complete, click **Next**.

5. Now extract the compressed .zip archive and install the appliance.

6. Once installed, power up the appliance and run through the Network Setup Wizard to configure the IP

address and other network settings.

7. Using the appliance's WebUI, navigate to: *Local Configuration > Portal Management*.

Portal Management

Connection Details		[Advanced +]
Gateway Enabled	☐	❓
Shuttle Enabled	☑	❓
		Update

Adopt Appliance		
Adoption Submitted	yes	
Portal Email	email@domain.com	❓
Portal Password	••••••••••••••	❓
		Begin Adoption

8. Enable (check) the *Shuttle Enabled* checkbox.

9. Click **Update** and then click **OK** in the popup message.

10. Restart the Gateway and Shuttle services using the restart buttons in the "Commit changes" box at the top of the screen.

11. Enter the *Portal Email* & *Portal Password* for the account you'd like the Shuttle to be associated with.

12. Click **Begin Adoption**.

13. In the Portal, click the **Skip to Overview** button.

14. The new Shuttle will appear in the list, click the **Adopt** button.

15. Click the **Skip ADC Adoption** button.

The shuttle is now ready for use.

Refer to Method 3 - Adopting an ADC From the Portal for details on how to use the shuttle.

5. More Information

For more information, please refer to the Portal Overview on our website.

6. Loadbalancer.org Technical Support

If you have any questions regarding the Portal or need assistance with load balancing your application, please don't hesitate to contact support@loadbalancer.org.

LOADBALANCER

About Loadbalancer.org

Loadbalancer.org's mission is to ensure that its clients' businesses are never interrupted. The load balancer experts ask the right questions to get to the heart of what matters, bringing a depth of understanding to each deployment. Experience enables Loadbalancer.org engineers to design less complex, unbreakable solutions - and to provide exceptional personalized support.