

# ARDC Portal 2.0 Technical Documentation

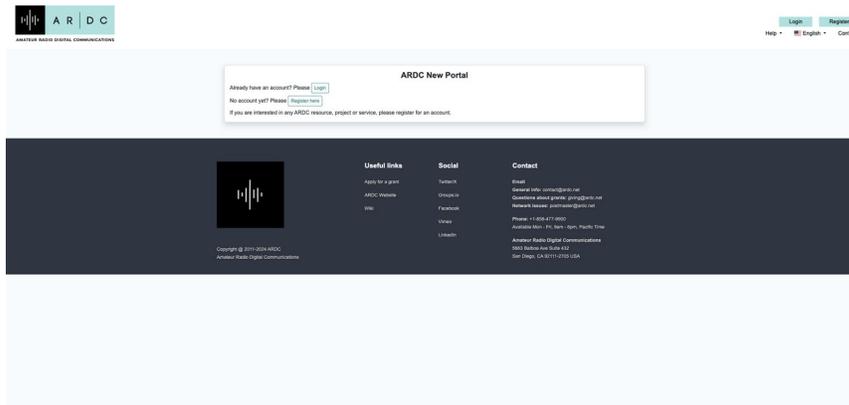
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# Accessing the Portal

1. Go to <https://portal.ampr.org>, where you should see the following UI:



## Registration

1. Click on the 'Register' button at the top right of the UI (see 'Accessing the Portal', step 1) or on the 'Register here' button in the 'ARDC New Portal' dialog box. This will take you to the following screen:

The screenshot shows the 'Registration (Step 1/3)' form. It has a heading 'Registration (Step 1/3)' and a note 'Fields marked \* are mandatory'. The first field is 'What we should call you?: \*' with a text input containing 'Your name. E.g. Bill, Jane, etc.'. Below this field is a 'Continue' button.

2. Complete the field for 'What we should call you?:' and click 'Continue'.
3. In the dialog box titled 'Registration (Step 2/3)', you will be introduced to help icons ('?') that will provide you useful information throughout the Portal. Click 'Close' to exit the dialog box.

The screenshot shows the 'Registration (Step 2/3)' form. It has a heading 'Registration (Step 2/3)' and a note 'Fields marked \* are mandatory'. The form has three input fields: 'Email: \*' with 'Your email address', 'Username: \*' with 'Enter a username', and 'Password: \*' with 'Enter a password'. There is a 'Show password' checkbox and a 'Continue' button. A help dialog box is open over the 'Email' field, containing the text: 'On this site when a form appears hover your mouse over this help icon to view useful information on the field.' and a 'Close' button.

From there, you enter your email address, a username (used to login) and a password, then click 'Continue'.

The screenshot shows the 'Registration (Step 2/3)' form. It has a heading 'Registration (Step 2/3)' and a note 'Fields marked \* are mandatory'. The form has three input fields: 'Email: \*' with 'Your email address', 'Username: \*' with 'Enter a username', and 'Password: \*' with 'Enter a password'. There is a 'Show password' checkbox and a 'Continue' button. Each input field has a small green question mark icon to its right.

- You should then arrive at a dialog box titled 'Registration (Step 3/3)' that displays the Terms of Use. Read through the Terms of Use (you must scroll all the way to the bottom), and if you agree to the terms and conditions, tick both "I AM 18 YEARS OF AGE OR OLDER", and "I accept and agree to the terms of this End User License Agreement", and then click 'I Accept'. Note that if you are under the age of 18, and/or if you do not agree with the Terms of Use, then you will not be able to use the Portal.

### Registration (Step 3/3)

**Name:** Rebecca  
**Email:** rebecca@ardc.net

By clicking on the button below that indicates "I ACCEPT" you (hereinafter called "the User") agree to be bound by the terms of this End User License Agreement (hereinafter called the "EULA") with Amateur Radio Digital Communications (hereinafter called "ARDC"). If the User does not agree to this EULA, the User cannot use ARDC's internet protocol address(es) or any related network services, infrastructure, or software (hereinafter called the "Services").

"station" means the equipment used to communicate via and/or experiment with ham radio.

"subnet" is a portion of a network, usually defined by a single network address or range of address(es) which are wholly contained within the range of addresses making up the network as a whole. Networks and subnets are usually referred to by a base address (i.e, the least address in the range) and a number of highest-order bits which is invariant over that range, e.g. 44.0.0.0/8 would encompass that address through 44.255.255.255 as written in Internet standard notation.

"tunnel" is one way of providing connectivity between parts of a network

BY CLICKING ON THE BUTTON BELOW THAT INDICATES "I ACCEPT," THE USER AGREES TO BE BOUND BY THE TERMS OF THE EULA WITH ARDC.

I AM 18 YEARS OF AGE OR OLDER

I accept and agree to the terms of this End User License Agreement.

\* You must scroll to the end of the document in order to enable the "I ACCEPT" button.

\* If you do not agree with the EULA you should navigate away from this site now, the details you have already entered will not be saved.

- Note: When you log back in on a later date you might get a notice about the addition and/or updates to the End User License Agreement (EULA). For example, if you see a dialog box titled 'The EULA has been updated.', verify that you are 18 or older and if you would like to continue using the Portal, accept the updated EULA.
- Upon accepting the Terms of Use, you should get a message (see below) informing you that the system is sending you an email verification with further instructions. Follow the instructions in this email.

### Verify Email

Thank you for registering with ARDC.

We have just sent you an email with instructions on how to verify your email address. Please follow the instructions in this email to continue with your registration. If the email does not arrive in your inbox shortly, please check your spam folder. If you do not receive the email please use the Contact menu link above for assistance.

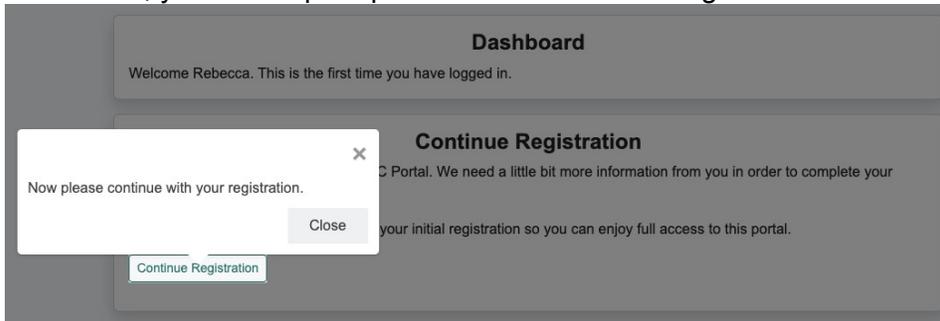
If you need us to resend the verification email, please use the button below.

- Once you complete the instructions in the email, you should get a page that looks like the one below, which will have an alert entitled 'You successfully verified your email'. Fill in the information in the 'LOGIN' dialog box and click 'Login'.

The screenshot shows the ARDC website header with the logo and navigation links (Home, English, Contact). A green alert box at the top states "You successfully verified your email". Below the alert is a "LOGIN" dialog box with the following fields and options:

- Fields marked \* are mandatory: Username, Password.
- Options:  Show password,  Remember me.
- Buttons: Login, Forgot username, Reset Password.

- From there, you will be prompted to click 'Continue Registration'.



- Once you click 'Continue Registration', you will arrive at the screen below. Select your type of registration (individual licensed radio amateur, individual non-licensed radio amateur, or organization) and click the 'Continue' button.

A form titled "Registration: Who are you?". It asks the user to select who they are registering on behalf of from the list below:

- I am registering as an individual licensed radio amateur
- I am registering as an individual, but I am not a licensed radio amateur
- I am registering on behalf of an organisation (This can be any kind, e.g. Radio Club, Maker Club, Non-profit organisation, Commercial entity, etc)

There is a "Continue" button at the bottom.

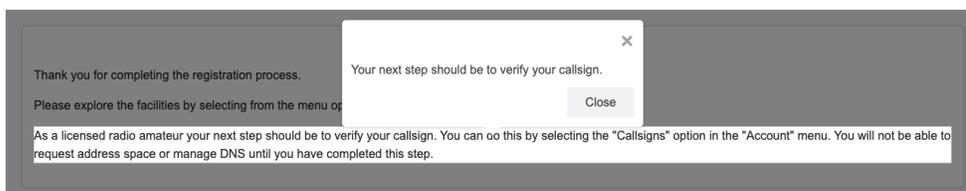
- Once you click 'Continue', you will be brought to a page where you will be asked to provide more information.

A form titled "Register as licensed radio amateur". It has a note: "If you need help please click/tap on the ? in the box to the right of the field." The form is divided into sections:

- Your details**: Fields for Callsign, Maidenhead, Language (English), Country (United States), and Timezone (utc).
- Optional details**: Fields for Title, Pronouns, Given name, Family name, Cellphone (+1), Address, and Zipcode.
- Agree to terms**: A checkbox for "Check to agree to our Terms and Conditions".

There is a "Continue" button at the bottom.

- Provide the required information (and any optional information you prefer to share), read and agree to the 'Terms and Conditions', and click the 'Continue' button. You should then see a dialog box prompting you to verify your callsign.



Click 'Close', and you will then see a page that shows 'Registration Complete'.

### Registration Complete

Thank you for completing the registration process.

Please explore the facilities by selecting from the menu options above.

As a licensed radio amateur your next step should be to verify your callsign. You can do this by selecting the "Callsigns" option in the "Account" menu. You will not be able to request address space or manage DNS until you have completed this step.

11. To add and verify your callsign (i.e., if you registered as an 'individual licensed radio amateur'), go to the 'Account' dropdown menu and select 'Callsigns'. Your primary callsign should show up in the 'Update your callsigns' dialog box. Clicking 'Add a callsign' in the top left-hand corner allows you to add any additional callsigns you may have.

### Update your callsigns

[Add a callsign](#)

Callsign	Verified	Actions
KO4KVG (Primary)	Not verified yet	<a href="#">Verify</a>

If you are a licensed radio amateur you can enter your callsign (or callsigns if you have more than one) here. If you want to request IP address assignments and obtain access to the DNS management features here, you need to verify at least one callsign.

12. On the 'Update your callsigns' UI, click 'Verify'. This will take you to a screen that details the process of verification.

### Verify callsign: KO4KVG

[List callsigns](#)

[Verify](#)

If you wish to get the above callsign verified please tap/click on the "Verify" button. This will create a ticket and one of our team will process your request. In some cases we may be able to verify your callsign without contacting you, in which case you will receive a notification that your ticket has been completed. Otherwise, if the team member needs to ask you any questions in order to verify your callsign, they will update the ticket, you will then receive a notification that your ticket has been updated and you need to respond in order to progress the request. If you fail to respond to the request for further information you will receive a couple more reminders before the ticket is automatically closed. If that happens you will need to start the verification process again.

Verifying your callsign is an important step in raising your LoT (Level of Trust) and therefore opening up more functionality here. Verifying your callsign will, for example, allow you to request IP address assignments and use your callsign as a sub-domain for DNS.

13. Click on the green 'Verify' button: you should see an alert saying 'Your request to verify your callsign [\$callsign] has been submitted', which will create a ticket for the Portal admins to verify

The screenshot shows a notification banner at the top: "Your request to verify your callsign KO4KVG has been submitted." Below it is a preview of the "Update your callsigns" page, which includes the "Add a callsign" button, a table with the callsign KO4KVG (Primary) in a "Pending" state, and a "Verify" button.

your call sign. You can check the ticket by going to the 'Tickets' dropdown menu, selecting 'View my tickets', where you see it listed. To see the details of the ticket, click 'View'.

### List your tickets

Title	Status	Assigned to	Actions
Verify callsign: KO4KVG	new	Unassigned	<a href="#">View</a>

Note that once your callsign has been verified, you will no longer see the ticket in the list. Alternatively, you can confirm that your callsign has been verified by going to 'Account' > 'Callsigns', and the status of your callsign verification will be displayed in the 'Update your callsigns' dialog box. Once your call sign has been verified, you will be able to request address space.

**Update your callsigns**

[Add a callsign](#)

Callsign	Verified	Actions
KO4KVG (Primary)	Thu, 15 Feb 2024 13:14:40 -0500	

If you are a licensed radio amateur you can enter your callsign (or callsigns if you have more than one) here. If you want to request IP address assignments and obtain access to the DNS management features here, you need to verify at least one callsign. You can start that process by clicking the "Verify" button above.

## Requesting Address Space (Beginner Friendly Steps)

This series of steps is aimed at users who are either new to requesting 44Net address space, need a refresher, or would like to streamline the process. Otherwise, you can also request address space via the Network list in the 'Requesting Address Space (via Network List)' and Requesting Address Space for BGP Use (via Network List) sections below.

1. Under the 'Networks' menu, select 'Request addresses'. Note that you can also request address space on the Dashboard by clicking 'Request address space'.

**Dashboard**

Welcome Rebecca. This is the first time you have logged in.

[Request address space](#)

---

**Messages**

Please turn on 2FA authentication to enhance your security.

Login notification

40 minutes ago

2. You should see a dialog box entitled 'Request Address Space'. Select your address type (should be IPv4, as IPv6 is not currently available), use case, and click 'Continue'. Please see the below instructions for your particular use case.

**Request Address Space**

Fields marked \* are mandatory

Address type: \*  ?

Use case: \*  ?

[Continue](#)

# Use Case: IPIP Tunnel Mesh, Standalone or Globally Unique Space

1. If you selected IPIP tunnel mesh or Globally unique space as your use case, you will see a dialog box entitled 'Request IP Assignment'. Fill out the 'Request IP Assignment' dialog box with the required information; and click 'Continue'.

**Request IP Assignment**

List networks

Fields marked \* are mandatory

Parent: 44.61.0.0/16 ?

Size: \* /30 ?  
Help with CIDR notation?

Use Case: \* Select Use Case ?

Title: \* Title ?

Description: \* [Empty] ?

I Agree to EULA

Continue

2. You will then see the following note thanking you for requesting address space from ARDC, which includes detailed information about next steps.

**Thank you for requesting address space from ARDC.**

A ticket has now been created to handle your request. The owner of the parent address space you placed your request in has been notified and should respond to the ticket shortly. In some cases they may ask you some questions to validate your request, so keep an eye out for updates to the ticket.

You may view the current status of your request by selecting "View my tickets" from the "Tickets" menu above.

If you placed your request within a network already assigned to someone, it is likely there is only one person that is able to respond to your request, so please be patient and wait for a reply. The system will send reminders automatically, so you do not need to! If you have been waiting for a reply for over a week please feel free to contact ARDC staff by using the "Contact" menu above and select "Address assignment issues" as the reason.

If you placed your request within one of the public blocks managed directly by ARDC then you should receive a reply fairly quickly as we have a pool of administrators available to respond to assignment requests.

3. Once your address space has been assigned, you can proceed to step 6 under 'Requesting Address Space (via Network List)'.

# Use Case: BGP Direct Announce

1. If you selected 'BGP Direct Announce' as your use case, you will see a dialog box entitled 'Request IP Assignment'. Fill out the 'Request IP Assignment' dialog box with the required information, agree to the EULA, and click 'Continue'.

The screenshot shows the 'Request IP Assignment' dialog box. At the top, there is a 'List networks' button and a note: 'Fields marked \* are mandatory'. The form contains the following fields: 'Parent' (44.31.0.0/16), 'Size: \*' (/24), 'Use Case: \*' (BGP direct announce), 'Title: \*' (BGP Announce), and 'Description: \*' (BGP announcement for use with virtual machine.). There is a 'Help with CIDR notation?' link below the size field. At the bottom, there is a checked checkbox for 'Agree to EULA' and a 'Continue' button.

1. If the size of the address space you're requesting exceeds your IP address limit, you will get the warning 'This request would exceed your IP address limit.' Click 'Please view this

This screenshot shows the same 'Request IP Assignment' dialog box, but with a red warning message: 'This request would exceed your IP address limit. Please view this page for information on how to increase your limits.' The 'Title' field now contains 'BGP direct announce' instead of 'BGP Announce'. The 'Continue' button is still present at the bottom.

page for information on how to increase your limits', which will provide detailed information for 'How to request more address space', along with links to learn more information about Level of Trust (LoT) and Classless Inter-Domain Routing (CDIR).

### How to request more address space

This portal sets limits on certain activities based on your LoT (Level of Trust). You can [read all about LoT on this page](#). It explains how we calculate your LoT and what you can do to increase your LoT.

In terms of IP address space, you can view your current limits by viewing your profile page. This can be reached either from the "Profile" button along the top, or by selecting "Profile" from the "Account" menu. Your limits are displayed in CIDR format, e.g., in the IPv4 limit "29" means /29 or 8 IP addresses. This limit is your total, so if you already had 4 IPv4 addresses assigned, you would be able to request up to 4 additional IPv4 addresses. If you tried to request more, it would not allow the request to be created.

If you need a refresher on what CIDR means, please [take a look at this page](#).

When you first register, both your IPv4 and IPv6 limits are set to zero, meaning you cannot request any address space. Once you verify your callsign, the limit is raised to /28 for IPv4 and /64 for IPv6. After that, you can follow the [LoT information page](#) to raise your LoT and obtain higher limits.

2. Follow step 2-1 under 'Requesting Address Space for BGP Use (via Network List)'. Please note that you may be asked to provide more information to increase your LoT to acquire more address space.
2. Once your additional address space has been allocated, go back to 'Networks' > 'Request Addresses', select your address type 'BGP direct announce' for your use case, and proceed with step 3 under 'Requesting Address Space for BGP Use (via Network List)'.

## Other Use Cases

Selecting any of the below use cases will give you a dialog box that provides more details about the network:

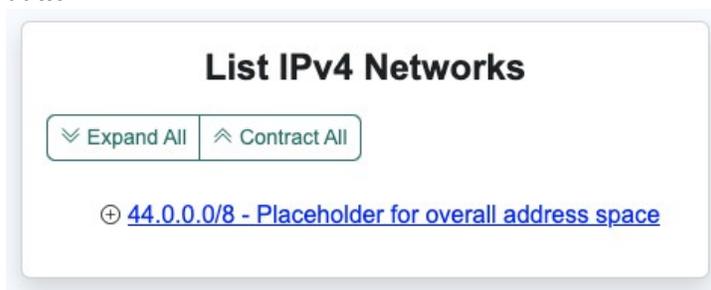
- AREDN
- HAMNET
- HamWAN

## Use Cases Coming Soon

- POP VPN
- Emergency communications
- General address assignment

## Requesting Address Space (via Network List)

1. Under the 'Networks' menu, select 'All IPv4 Networks'.
2. In the 'List IPv4 Networks' dialog box, click the + sign to expand a line, or use the 'Expand All' button.



3. Scroll to look for the address space you are looking for (e.g., 44.63.0.0/16 - IPIP Mesh Assignments) and click on the green clipboard icon to the right of the assignment to request an assignment.

- [44.62.18.16/28 - KJ4OCE Experiment Lab](#)
- [44.62.31.32/27 - East Mountains](#)
- [44.62.64.0/24 - Kelso Mill](#)
- [44.62.200.38/32 - Two Ip already in use](#)
- [44.62.200.39/32 - additional allocation](#)
- 
- [44.63.0.0/16 - IPIP Mesh Assignments](#)
- [44.63.0.1/32 - N3BYR](#)
- [44.63.0.2/32 - leonwv](#)
- [44.63.0.3/32 - KG4K](#)
- [44.63.0.4/32 - Robot](#)
- [44.63.0.5/32 - Personal IP Address](#)
- [44.63.0.6/32 - W2LPC](#)
- [44.63.0.7/32 - Home tunnel experiment](#)
- [44.63.0.8/32 - SM6EXB](#)
- [44.63.0.9/32 - amprnet experiments](#)
- [44.63.0.10/32 - Shellfish Messagerie](#)

4. Fill out the 'Request IP Assignment' dialog box with the required information, click 'Continue'.

### Request IP Assignment

Fields marked \* are mandatory

Parent:  ?

Size: \*  ?

Use Case: \*  ?

Title: \*  ?

Description: \*  ?

I Agree to EULA

You will see the dialog box titled 'Thank you for requesting address space from ARDC' (see step 2 under 'Use Case: IPIP Tunnel Mesh, Standalone, or Globally Unique Space'), which includes detailed information about next steps.

5. To confirm that your address space has been successfully requested, you can go to 'Tickets' > 'View my tickets' to see if the request is in your ticket list. Note that you may be asked to

List your tickets			
Title	Status	Assigned to	Actions
IPv4 Address Assignment Request for 44.63.0.0/29	new	Unassigned	<input type="button" value="View"/>

provide more information to the Ticket Handler about your request before your address space is assigned.

**View a support ticket**

Fields marked \* are mandatory

Add comment \*

Add reply Mark as resolved

You can add files after you submit a comment.

Chris (TicketHandler) 2024-02-15 18:26:11

Why do you want this?

Rebecca Key (TicketCreator) 2024-02-15 18:24:51

Dear Admin, please process the Network Assignment Request for Rebecca Key.

**Ticket Information**

Created by: Rebecca Key 2024-02-15 18:24:51

Title: IPv4 Address Assignment Request for 44.63.0.0/29 Ticket ID: 8

Type: Admin

Category: Network Management

Status: with user (Assigned to: Chris)

- Once your space has been assigned (and the associated ticket has been closed), you can view your IPv4 networks by going to 'Networks' > 'my IPv4 networks', where your network detail(s) will be provided.

**Network Detail**

List networks

Organisation	Amateur Radio Digital Communication
User	Rebecca Key
Network	44.63.10.0
CIDR	29
Title	IP-IP mesh (TEST)
Description	Test request

## Adding DNS Records to a Subdomain

- On the 'DNS' dropdown menu, select 'My subdomains' and then click 'Request a subdomain' in the 'My subdomains' dialog box.

**My subdomains**

Request a subdomain

Rows: 100

SubDomain	Domain	Actions
No subdomains found.		

- Choose your domain, determine a name for your subdomain (i.e., most likely your callsign), click 'Create request', and you should see a dialog box titled 'Thank you for requesting a new

**Create new subdomain request**

List subdomains

Fields marked \* are mandatory

Domain:\* Select a domain ?

Subdomain:\* Subdomain ?

Notes Notes ?

Create request

subdomain!' (see below), along with an overview of next steps. You can verify that your subdomain has been requested by viewing your tickets ('Tickets' > 'View my tickets').

### Thank you for requesting a new subdomain!

A ticket has been created to handle your request. One of the administrators will now take ownership of your ticket and process your request. The administrator may update the ticket to ask you some questions before creating your new subdomain, so keep an eye out for updates and please try to reply asap.

You may view the current status of your request by selecting "View my tickets" from the "Tickets" menu above.

If you are requesting a subdomain based on your callsign, and you have already verified your callsign, then the process should be straight forward and the administrator may not even ask you any questions, in which case your subdomain will simply be created and the ticket closed.

### List your tickets

Title	Status	Assigned to	Actions
Subdomain request for ko4kvg	new	Unassigned	<a href="#">View</a>
IPv4 Address Assignment Request for 44.63.0.0/29	with user	Chris	<a href="#">View</a>

- Once the ticket for creating your subdomain has been closed (see below), you can verify that

### List your tickets

Title	Status	Assigned to	Actions
Subdomain request for ko4kvg	closed	Chris	<a href="#">View</a>
IPv4 Address Assignment Request for 44.63.0.0/29	with user	Chris	<a href="#">View</a>

your subdomain has been created by going to 'DNS' > 'My subdomains', and your subdomain should appear in the 'Subdomains' dialog box.

### Subdomains

[Request a subdomain](#)

Rows: 100

SubDomain	Domain	Actions
ko4kvg	ampr.org	 

- Once your subdomain has been created, you can add DNS records by going to 'DNS' > 'My subdomains', and click the icon under 'Actions' in the 'Subdomains' dialog box (see step 3 above).
- In the 'Resource records for \$subdomain.ampr.org', click 'Add a resource record'.

### Resource records for ko4kvg.ampr.org

[List my subdomains](#)

[Add a resource record](#)

Rows: 100

Enabled	Hostname	Type	Rdata	TTL	Actions
No resource records found					

- In the 'Create resource record for \$subdomain.ampr.org', select the record type, and click 'Next' (see below).

Create resource record for ko4kvg.ampr.org

List resource records

Fields marked \* are mandatory

Type: \*  ?

Next

7. Add the details relevant to the record type and ensure that Active is checked, click 'Create',

Create resource record for ko4kvg.ampr.org

List resource records

Fields marked \* are mandatory

Type:  ?

Hostname: \*  ?

TTL:  ?

IPv4 Address: \*  ?

Active:  ?

Create

and you should get an alert that says 'Subdomain Record created successfully'.

Subdomain Record created successfully.

Resource records for ko4kvg.ampr.org

List my subdomains  
Add a resource record

Enabled	Hostname	Type	Rdata	TTL	Actions
<input checked="" type="checkbox"/>	www	A	44.63.10.2	86400	

Rows: 100

8. You can verify that your record has been created by going to 'DNS' > 'My records' and look for the record that is associated with your subdomain.

Resource records

Show  entries Search:

Enabled	Hostname	Type	Actions
<input checked="" type="checkbox"/>	www.ko4kvg.ampr.org	A	

Showing 1 to 1 of 1 entries Previous **1** Next

## Creating a Gateway

1. Go to 'Networks' > 'My gateways' and click 'Create a Gateway' in the 'My Gateways' dialog box.

My Gateways

Create a Gateway

Show  entries Search:

IP	Actions
No matching records found	

Showing 0 to 0 of 0 entries (filtered from 893 total entries) Previous Next

2. In the 'Create new Gateway' dialog box, fill out all required fields, click 'Add', and you should get an alert saying 'Gateway created successfully.'

The image shows two screenshots from a web application. The top screenshot is a 'Create new Gateway' dialog box. It has a title bar with 'View My Gateways' on the left and 'Create new Gateway' in the center. Below the title bar, it says 'Fields marked \* are mandatory'. There are four input fields: 'Description: \*' with the value 'Description', 'IP: \*' with the value 'IP', 'Hostname: \*' with the value 'Hostname', and 'Notes:' with the value 'Notes'. Each field has a small teal button with a question mark to its right. At the bottom left of the dialog is a teal 'Add' button. The bottom screenshot is a green alert box with the text 'Gateway created successfully.' and a close button (X) in the top right corner. Below the alert is a smaller screenshot of the 'List Gateways' page, which shows a table with one entry: IP: 192.0.2.112. There are 'Previous' and 'Next' buttons at the bottom of the table.

3. To add a subnet to your gateway, click the edit button under 'Actions' (see step 2 above). You will be taken to an 'Update Gateway' dialog box, which includes information about your gateway. Click 'Add New Network'.

The image shows a screenshot of the 'Update Gateway' dialog box. It has a title bar with 'List Gateways' on the left and 'Update Gateway' in the center. Below the title bar, it says 'Fields marked \* are mandatory'. There are four input fields: 'Description: \*' with the value 'Create gateway (TEST)', 'IP: \*' with the value '192.0.2.112', 'Hostname: \*' with the value 'Hostname', and 'Notes:' with the value 'Setting up a gateway / test walkthrough'. Each field has a small teal button with a question mark to its right. At the bottom left of the dialog is a teal 'Update' button. Below the 'Update' button is a teal 'Add New Network' button. At the bottom of the dialog, there are two columns: 'Network' and 'Actions'.

4. You will then see an 'Add New Network' dialog box (see below). Select a network from your list of networks; leave 'Find Network' field blank; and then click 'Add'. You should see an alert titled 'Network Successfully Linked to this Gateway' (see below). You can verify that your network has been added by clicking 'View My Gateways' and seeing said gateway under 'My Gateways' (see below).

### Add New Network

[Back to Edit Gateway](#)

Fields marked \* are mandatory

Network: \*  ?

Find Network: \*   ?

Network found

Network Successfully Linked to this gateway

#### Update Gateway

[View My Gateways](#)

Fields marked \* are mandatory

Description: \*  ?

IP: \*  ?

Hostname: \*  ?

Notes:  ?

**Linked Networks**

Network	Actions
44.63.200.0/32	<input type="button" value="Unlink"/>

[Add New Network](#)

### My Gateways

[Create a Gateway](#)

Show  entries Search:

IP	Actions
192.0.2.112	<input type="button" value="✍"/> <input type="button" value="🗑"/>

Showing 1 to 1 of 1 entries (filtered from 904 total entries)  **1**

- If you would like to add someone else's network using their unique code, click 'Add New Network', which will take you to the 'Add New Network' dialog box. Fill out the required information, and click 'Find'. You should have a 44Net address displaying in the 'Network found' field. Click 'Add', and you should see an alert titled 'Network Successfully Linked to this Gateway' (see step 4 above).

### Add New Network

[Back to Edit Gateway](#)

Fields marked \* are mandatory

Network: \*  ?

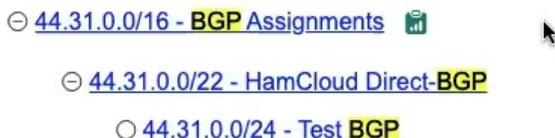
Find Network: \*   ?

Network found

- You can add or remove linked networks by clicking the 'Add New Network' or 'Unlink' button, respectively (see steps 3 and 4 above).

# Requesting Address Space for BGP Use (via Network List)

1. From the 'Networks' dropdown menu, go to 'All IPv4 networks', and request a BGP assignment (e.g., 44.31.0.0/16 – BGP Assignments) by clicking on the 'Request Assignment' icon to the right of the listed assignment (green clipboard).



2. On the 'Request IP Assignment' dialog box, fill out the mandatory fields, agree to the EULA, and click 'Continue'.

**Request IP Assignment**

List networks

Fields marked \* are mandatory

Parent: 44.31.0.0/16

Size: \*/24

Use Case: BGP direct announce

Title: BGP Announce

Description: BGP announcement for use with virtual machine.

Agree to EULA

Continue

1. If the size of the address space you're requesting exceeds your IP address limit, you will need to open a ticket to request the additional address space. Under the 'Tickets' dropdown, select 'New support ticket', fill out the 'Create a new support ticket' dialog box

**Create a new support ticket**

Fields marked \* are mandatory

Type: Help with an IP request

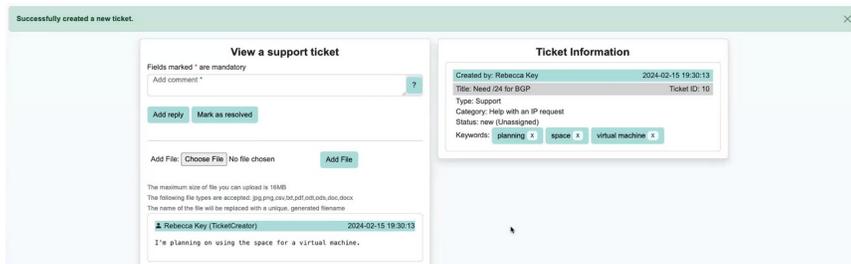
Title: Need /24 for BGP

Description: I'm planning on using the space for a virtual machine.

Continue

• If you need to upload files to support this request you may do so on the next page.

accordingly, click 'Continue', and you will get an alert saying that you 'Successfully created



a new ticket'. You may be asked to provide more information to successfully get the address space granted. Once you're granted the address space, repeat steps 1 - 2 of this section.

3. You should see a 'BGP Information' dialog box on the UI. Fill out the mandatory information,

**BGP Information**

[Back to IP Assignment](#)

Fields marked \* are mandatory

ASN: \*  ?

Admin  ?

Tech  ?

Justification: \*  ?

NSPs: \*  ?

[Add NSP](#)

[Submit Request](#)

click 'Submit Request', and you should now see 'Thank you for requesting address space from ARDC' on your UI (see Step 2 under 'Use Case: IPIP Tunnel Mesh, Standalone or Globally Unique Space'). Note that the Justification must be more than 100 characters.

4. You can confirm the address has been successfully requested by going to 'Tickets' > 'View my tickets', and your request should be visible in the 'List your tickets' dialog box. Once the ticket

**List Own IPv4 Networks**

[Expand](#) [Contract](#)

- [44.31.254.0/24 - BGP Announce](#)
- [44.63.10.0/29 - IP-IP mesh \(TEST\)](#)

has been closed, you should see the allocation listed in your IPv4 networks. Clicking 'Edit' will bring you to the 'Update Network' dialog box, where you can make appropriate updates, download the EULA, download the Letter of Authorizaton (LOA), etc (see below).

### Update Network

[Back to Networks](#)

Fields marked \* are mandatory

Network	44.32.100.0/24	?
Title:*	BGP Announce	?
Description:*	BGP announcement for use with virtual machine.	?
Notes	Notes	?
Mode:	Private	?
Unique ID:		?
	<input type="checkbox"/> Refresh <input type="checkbox"/> Clear box	
Auto:	<input type="checkbox"/>	?
CIDR Min:*	32	?
CIDR Max:*	25	?
Use case(s):	<span style="background-color: #e0f2f1; padding: 2px;">BGP direct announce</span>	

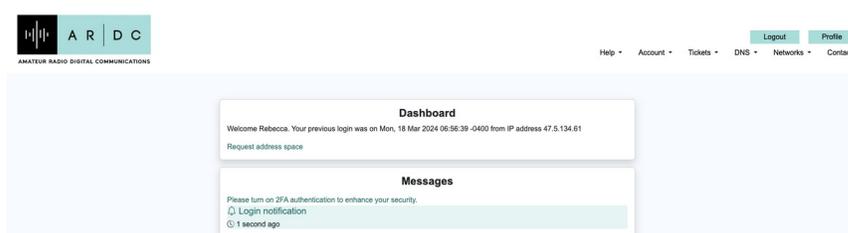
Update

[Download EULA](#)

# v2.0 Features

## Dashboard

1. After logging in, you should see your Dashboard. If your email has been verified, you should see an 'Account' menu and a 'Tickets' menu at the top right-hand side of the UI. If you have been granted additional privileges, you will see additional menus for those related privileges. The Dashboard will also display information boxes, such as your latest login, IP, and timestamp, or outstanding notifications you need to be aware of.



## Help

The 'Help' dropdown menu provides the following options:

- **2FA:** defines 2FA and provides details on multiple 2FA options to choose from to add to your account
- **LoT:** provides an overview of Level of Trust (LoT), how it works, and how to increase your LoT

- **CIDR:** provides an overview of Classless Inter-Domain Routing (CIDR)
- **Limits:** provides an explanation of your specific limits on Portal activities, which are directly related to your current LoT
- **Member pages:** These are pages generated by other members
- **Subdomains:** provides an overview of subdomains and DNS and steps needed to request subdomains
- **Passwords:** provides password requirements and recommendations for how to create a strong password for your Portal account
- **Glossary:** includes definitions for terminology relevant to using the Portal
- **Community:** includes links to ARDC's Groups.io group, along with links to relevant subgroups

## Account

The 'Account' dropdown menu provides the following options:

- **Profile:** allows you to view and update your personal data
- **Callsigns:** allows you to add/remove/verify your callsign(s)
- **LoT List:** lists your Level of Trust (LoT) entries
- **LoT Info:** explains what Level of Trust is
- **Notifications:** displays a list of user notifications
- **Notification types:** displays all notification types/options
- **View all notifications:** displays all your active notifications
- **View logs:** displays all your log entries
- **Add public page:** displays any public pages you have added and provides the ability to add more
- **Delete my account:** allows a user to delete their account

## Profile

A user's profile is always available, whether or not a their email address has been verified. Through the profile, a user has access to the following:

- Personal Information (PII) a user chooses to share with ARDC
- The ability for a user to update their account
- The ability for a user to enable 2FA on their account

Changes made to the profile will require the current password to be entered at the bottom of the page and clicking 'Save' for changes take effect.

# Callsigns

Here, the user is presented with a list of all callsigns they have entered. A user can add up to a maximum of five callsigns, with only one call sign being the primary. Callsigns must be verified before they can be used. All verified callsigns must be unique within the system.

# Level of Trust (LoT) & LoT List

The Portal uses various methods to verify users and thus gain 'trust', which is referred to as the 'Level of Trust' (LoT). LoT is used to increase confidence that a user is who they say they are and record that there is a skill set and knowledge that is needed to assign responsibilities to said user in the Portal.

As various tasks are accomplished, such as verification of email and/or call signs, points will be assigned to a users' account. The more points a user has, the higher the LoT. You can learn more about LoT by going to either 'Help' > 'LoT' or 'Account' > 'LoT info' on the navigation menu.

The LoT List is a read-only list for LoT entries of a user. You can find this list by going to 'Account' > 'LoT list'. A user will have at least one entry that shows that their email address was verified. Below are a few examples of what accesses are granted based on a user's LoT.

- Email is not verified
  - User can login, access their own profile, delete their account
- Call sign is not verified
  - User cannot access DNS records or request address space

# Notifications

The system informs users of various events via notifications.

Notification types			
Type	Subscribed	Required	Actions
CONTACT MEMBER	Yes	Yes	<a href="#">Methods</a>
LOGIN	Yes	No	<a href="#">Methods</a>
PASSWORD RESET	Yes	Yes	<a href="#">Methods</a>
PROFILE UPDATE	Yes	No	<a href="#">Methods</a>
TICKET ASSIGNED	Yes	No	<a href="#">Methods</a>
TICKET UPDATED	Yes	No	<a href="#">Methods</a>
TICKET CLOSED	Yes	No	<a href="#">Methods</a>
TICKET REMINDER	Yes	Yes	<a href="#">Methods</a>
LoT UPDATE	Yes	No	<a href="#">Methods</a>
LoT EXPIRY	Yes	Yes	<a href="#">Methods</a>
LoT ADDED	Yes	Yes	<a href="#">Methods</a>
ACCOUNT EXPIRY	Yes	Yes	<a href="#">Methods</a>
BGP REQUEST	Yes	No	<a href="#">Methods</a>
NETWORK REASSIGNED	Yes	No	<a href="#">Methods</a>
NETWORK CHANGE	Yes	No	<a href="#">Methods</a>
LOA EXPIRY	Yes	Yes	<a href="#">Methods</a>
TICKET OWNERSHIP	Yes	No	<a href="#">Methods</a>

Notifications are assigned a specific type when they are sent. You can choose which type you wish to receive by selecting from the list above. [View the notification types.](#)

### Mandatory Notifications:

- Contact Member
- Password Reset
- Ticket Reminder
- LoT Expiry
- LoT Added
- Account Expiry
- LOA Expiry

### Optional Notifications:

- Login
- Profile Update
- Ticket Assigned
- ...and many more

Clicking on 'Methods' (under the 'Actions' column, see above) will allow the user to choose a preferred method of notification:

**Notification methods for : PASSWORD RESET**

Receive a notification when a password reset is requested. This is a required notification.

Notification types

Method	Active	Actions
EMAIL	Yes	<a href="#">Unsubscribe</a>
SMS	No	<a href="#">Subscribe</a>

From the list above you can select how you receive notifications for this notification type.

- Email
- SMS
- many more coming soon, e.g. Zulip, Signal, Telegram...

## Tickets

Tickets track tasks, along with their associated progress, within the Portal. Items managed by tickets include, but are not limited to:

- Call sign verification
- Request(s) for resources (e.g., address space)

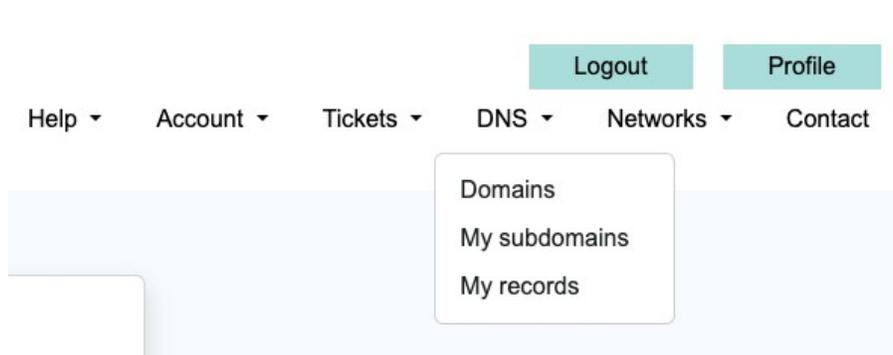
The 'Tickets' dropdown menu will allow the user to view all of their tickets, create a new support ticket, and serves as a reference to check the status of any user requests.

Ticket types that are not 'Support' are available within the system and are accessible to a user in a specific circumstance.

## Domain Name System (DNS) Records

ARDC manages the ampr.org domain for its own use and supports Portal user needs.

Once a user's call sign is verified, they should see the DNS dropdown menu with submenu options 'Domains', 'My subdomains', and 'My records'.

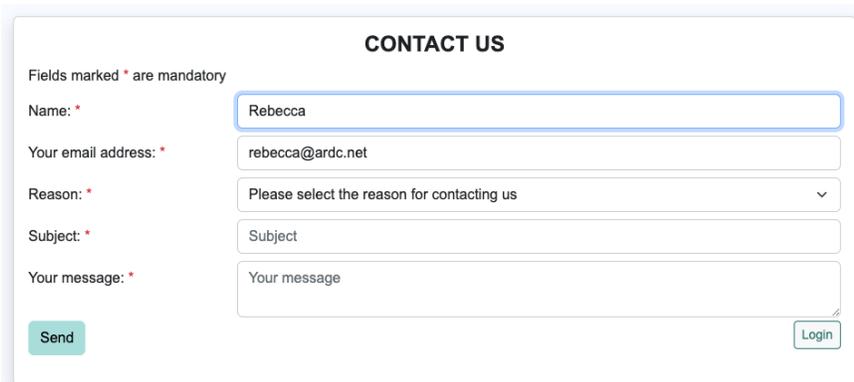


## Networks

Once a user's call sign is verified, they should see the 'Networks' dropdown menu with submenu options 'Request addresses', 'All IPv4 networks', 'All IPv6 networks', 'All gateways', 'My IPv4 networks', 'My IPv6 networks', 'My gateways'.

## Contact

Clicking 'Contact' takes you to the 'CONTACT US' form, where you can reach out to Portal admins with inquiries, reporting issues, etc.

A screenshot of a 'CONTACT US' form. The form has a title 'CONTACT US' and a note 'Fields marked \* are mandatory'. It contains five input fields: 'Name:' with the value 'Rebecca', 'Your email address:' with the value 'rebecca@ardc.net', 'Reason:' with a dropdown menu showing 'Please select the reason for contacting us', 'Subject:' with the value 'Subject', and 'Your message:' with the value 'Your message'. There are two buttons at the bottom: 'Send' and 'Login'.

## Helpful Resources

Subnet calculator: <https://www.calculator.net/ip-subnet-calculator.html>