



# Reg-RWS Basics: Automate Management of ARIN Records with API

**Jon Worley, Senior Technology Architect**

22 Feb 2024

# Agenda

API Keys & Management

4 Calls You Will Need Most

Creating a Recipient Customer

Creating a Customer Reassignment

Managing a Customer Reassignment

Removing a Customer Reassignment

# API Keys and Management

The slide features a teal background with a white horizontal band in the center. The title 'API Keys and Management' is written in a dark teal, sans-serif font within this band. Behind the text is a faint, light blue network diagram consisting of interconnected nodes and lines. A thick yellow horizontal line runs across the bottom of the white band, ending in a small yellow circle on the right side. On the far right edge of the white band, there is a small grey icon consisting of a circle connected to a horizontal line.

# What's an API Key?

A 16-character string in the form  
API-XXXX-XXXX-XXXX-XXXX

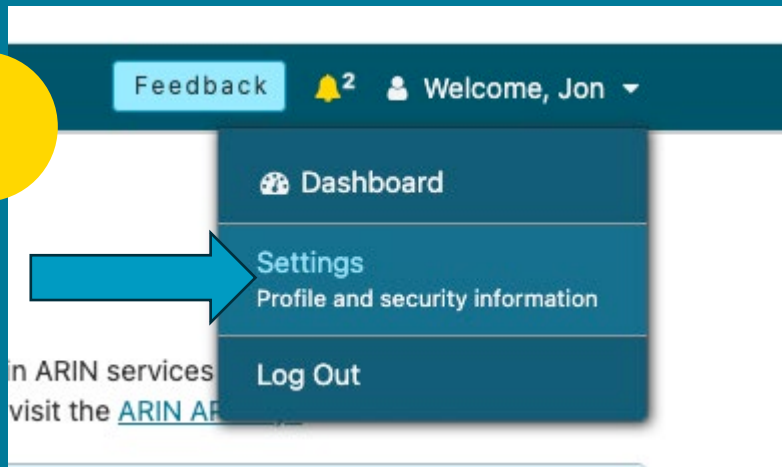
Included in the URL  
when you ask ARIN  
to create a customer  
record/reassignment



Has the same  
authority you  
would when logged  
in to ARIN Online

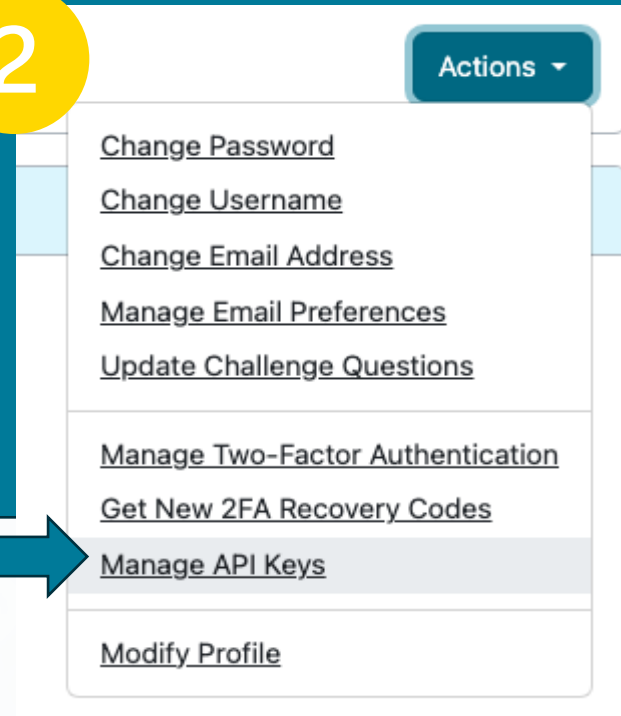
# Creating an API Key

1



2

Select Manage



3

## Generate an API Key

Please treat API keys like passwords and store them in a safe place, such as a third-party password management tool.

Create API Key

Create!



Make sure to store your API key somewhere safe when you create it.

After it's created, we will not display the full key for security purposes.



# Managing Keys

Manage Your API Keys		
Key Prefix	Date Created	Actions
API-9B67 ...	11-27-2023	<a href="#">Associate Email</a> (not recommended*) <span>Deactivate</span>

↑  
Full key not shown for security

↑  
Don't associate an email – remember, email is being deactivated

↑  
Deactivate and create on a schedule or when the key may be compromised

# Creating a Recipient Customer

The slide features a teal background with a white horizontal band in the center. The band contains a faint network diagram of interconnected nodes and lines. A thick yellow horizontal line runs across the bottom of the white band, ending in a circular dot on the right. On the far right of the white band, there is a small grey horizontal line with a circular dot at its left end.





# Create Recipient Customer

**Call creates a Customer Handle** using the details in the [Customer Payload](#) you provide, and the handle in your URL specifying the parent NET from which this Org will be receiving a simple reassignment.

This call will **return** a payload containing information about this newly-created customer.

**Note:** Be sure your API key is linked to a POC that is either the Admin or Tech POC for the Org holding the parent NET, or the Tech POC for the NET itself. Otherwise, you will receive an error.

# Create Recipient Customer

**Method:** POST

**URL:**

/rest/net/PARENTNETHANDLE/customer?apikey=APIKEY

**Content:** [Customer Payload](#)

**Returns:** [Customer Payload](#)



Creating a Recipient Customer



What does that look like?





# Create Recipient Customer - URL

URL:



https://reg.ote.arin.net/rest/net/NET-149-112-152-0-1/customer?apikey=API-E176-AA62-6DBB-44C5-987C-C28F-691F-4B09

POST ▾

Payload:

```
<customer xmlns="http://www.arin.net/regrws/core/v1" >
  <customerName>Example Customer</customerName>
  <iso3166-1>
    <name></name>
    <code2>US</code2>
    <code3></code3>
    <e164></e164>
  </iso3166-1>
  <handle></handle>
  <streetAddress>
    <line number = "1">123 Easy Street</line>
  </streetAddress>
  <city>Centreville</city>
  <iso3166-2>VA</iso3166-2>
  <postalCode>20121</postalCode>
  <comment>
    <line number = "1">Hello World!</line>
  </comment>
  <parentOrgHandle></parentOrgHandle>
  <registrationDate></registrationDate>
  <privateCustomer>false</privateCustomer>
</customer>
```



# Create Recipient Customer - Return

## Response

**Request URL:** <https://reg.ote.arin.net/rest/net/NET-149-112-152-0-1/customer?apikey=API-E176-AA62-6DBB-44C5-987C-C28F-691F-4B09>  
**Request Method:** POST  
**Response Time:** 0.051 seconds  
**Response Status:** 200 - OK

200

Response Body

Response Body (RAW)

Response Headers

Request Details

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?><customer xmlns="http://www.arin.net/regrws/core/v1"><city>Centreville</city><iso3166-1><code2>US</code2><code3>USA</code3><e164>1</e164><name>United States</name></iso3166-1><handle>C10685915</handle><comment><line number="0">Hello World!</line></comment><streetAddress><line number="0">123 Easy Street</line></streetAddress><customerName>Example Customer</customerName><parentOrgHandle>ARINL</parentOrgHandle><postalCode>20121</postalCode><privateCustomer>>false</privateCustomer><registrationDate>2024-02-20T10:17:35-05:00</registrationDate><iso3166-2>VA</iso3166-2></customer>
```

# Creating a Customer Reassignment





# Creating a Customer Reassignment

This call performs a **reassignment** from the NET specified in your URL using the recipient information contained in the [NET Payload](#) you provide.

Reassignments are given to an Org or customer for its **own use** and may not be reallocated or reassigned further.

Two types of reassignments can take place: simple and detailed.

# Creating a Customer Reassignment

Reassign NET

**Method:** PUT

**URL:**

/rest/net/PARENTNETHANDLE/reassign?apikey=APIKEY

**Content:** [NET Payload](#)

**Returns:** [Ticketed Request Payload](#)





## Creating a Customer Assignment



# What does that look like?





# Reassign Net - URL

URL:

☆ <https://reg.ote.arin.net/rest/net/NET-149-112-152-0-1/reassign?apikey=API-E176-AA62-6DBB-44C5-987C-C28F-691F-4B09>

PUT ▾

Payload:

```
<net xmlns="http://www.arin.net/regws/core/v1" >
  <version>4</version>
  <comment>
    <line number = "1">Hello World!</line>
  </comment>
  <registrationDate></registrationDate>
  <handle></handle>
  <netBlocks>
    <netBlock>
      <type>S</type>
      <description></description>
      <startAddress>149.112.152.0</startAddress>
      <endAddress>149.112.152.7</endAddress>
      <cidrLength>29</cidrLength>
    </netBlock>
  </netBlocks>
  <customerHandle>C10685915</customerHandle>
  <parentNetHandle>NET-149-112-152-0-1</parentNetHandle>
  <netName>TEST-NET</netName>
  <originASes>
  </originASes>
  <pocLinks>
  </pocLinks>
</net>
```



# Reassign Net – Return Payload

## Response

**Request URL:** <https://reg.ote.arin.net/rest/net/NET-149-112-152-0-1/reassign?apikey=API-E176-AA62-6DBB-44C5-987C-C28F-691F-4B09>  
**Request Method:** PUT  
**Response Time:** 0.222 seconds  
**Response Status:** 200 - OK

200

Response Body

Response Body (RAW)

Response Headers

Request Details

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?><ticketedRequest xmlns="http://www.arin.net/regrws/core/v1" xmlns:ns2="http://www.arin.net/regrws/messages/v1" xmlns:ns3="http://www.arin.net/regrws/shared-ticket/v1"><net><pocLinks/><customerHandle>C10685915</customerHandle><comment><line number="0">Hello World!</line></comment><netBlocks><netBlock><cidrLength>29</cidrLength><description>Reassigned</description><endAddress>149.112.152.007</endAddress><startAddress>149.112.152.000</startAddress><type>S</type></netBlock></netBlocks><handle>NET-149-112-152-0-2</handle><netName>TEST-NET</netName><originASes/><parentNetHandle>NET-149-112-152-0-1</parentNetHandle><registrationDate>2024-02-20T10:26:19-05:00</registrationDate><version>4</version></net></ticketedRequest>
```

# Managing a Customer Reassignment





# Managing a Customer Reassignment

This call will **modify** the details of the NET specified in your URL.

When making this call, attach a NET Payload containing the **details of the NET you intend to modify**.

To ensure accuracy, use **Get NET** to get the most current information before making changes.

This call **returns** a payload containing that NET's information as it exists after modification.

# Managing a Customer Reassignment

Modify NET

**Method:** PUT

**URL:** /rest/net/NETHANDLE?apikey=APIKEY

**Content:** [NET Payload](#)

**Returns:** [NET Payload](#)



## Managing a Customer Reassignment



# What does that look like?





# Modify Net - URL

URL:



https://reg.ote.arin.net/rest/net/NET-149-112-152-0-2?apikey=API-E176-AA62-6DBB-44C5-987C-C28F-691F-4B09

PUT ▾

Payload:

```
<net xmlns="http://www.arin.net/regrws/core/v1" >
  <version>4</version>
  <comment>
    <line number = "1">World - Hello!</line>
  </comment>
  <registrationDate>2024-02-20T10:40:56-05:00</registrationDate>
  <handle>NET-149-112-152-0-2</handle>
  <netBlocks>
    <netBlock>
      <type>S</type>
      <description></description>
      <startAddress>149.112.152.0</startAddress>
      <endAddress>149.112.152.7</endAddress>
      <cidrLength>29</cidrLength>
    </netBlock>
  </netBlocks>
  <customerHandle>C10685916</customerHandle>
  <parentNetHandle>NET-149-112-152-0-1</parentNetHandle>
  <netName>NET-EXAMPLE</netName>
  <originASes>
  </originASes>
  <pocLinks>
  </pocLinks>
</net>
```





# Modify Net – Return Payload

## Response

**Request URL:** <https://reg.ote.arin.net/rest/net/NET-149-112-152-0-2?apikey=API-E176-AA62-6DBB-44C5-987C-C28F-691F-4B09>  
**Request Method:** PUT  
**Response Time:** 0.054 seconds  
**Response Status:** 200 - OK

200

Response Body

Response Body (RAW)

Response Headers

Request Details

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?><net xmlns="http://www.arin.net/regrws/core/v1" xmlns:ns2="http://www.arin.net/regrws/messages/v1"><pocLinks/><customerHandle>C10685916</customerHandle><comment><line number="0">World - Hello!</line></comment><netBlocks><netBlock><cidrLength>29</cidrLength><description>Reassigned</description><endAddress>149.112.152.007</endAddress><startAddress>149.112.152.000</startAddress><type>S</type></netBlock></netBlocks><handle>NET-149-112-152-0-2</handle><netName>NET-EXAMPLE</netName><originalSession/><parentNetHandle>NET-149-112-152-0-1</parentNetHandle><registrationDate>2024-02-20T10:40:56-05:00</registrationDate><version>4</version></net>
```

# Removing a Customer Reassignment





# Removing a Customer Reassignment

This call will **delete** the details of the NET specified in your URL.

You do not need to attach a NET Payload, but it will work if you include one

This call **returns** a payload containing that NET's information as it exists after modification.

# Removing a Customer Reassignment

Remove NET

**Method:** DELETE

**URL:** /rest/net/NETHANDLE?apikey=APIKEY

**Content:** None

**Returns:** [Ticketed Request Payload](#)



## Removing a Customer Reassignment



# What does that look like?





# Delete Net

URL:



https://reg.ote.arin.net/rest/net/NET-149-112-152-0-2?apikey=API-E176-AA62-6DBB-44C5-987C-C28F-691F-4B09

DELETE ▾

## Response

**Request URL:** <https://reg.ote.arin.net/rest/net/NET-149-112-152-0-2?apikey=API-E176-AA62-6DBB-44C5-987C-C28F-691F-4B09>

**Request Method:** DELETE

**Response Time:** 0.114 seconds

**Response Status:** 200 - OK

200

Response Body

Response Body (RAW)

Response Headers

Request Details

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?><ticketedRequest xmlns="http://www.arin.net/regrws/core/v1" xmlns:ns2="http://www.arin.net/regrws/messages/v1" xmlns:ns3="http://www.arin.net/regrws/shared-ticket/v1"><net><pocLinks/><customerHandle>C10685915</customerHandle><comment><line number="0">Hello World!</line></comment><netBlocks><netBlock><cidrLength>29</cidrLength><description>Reassigned</description><endAddress>149.112.152.007</endAddress><startAddress>149.112.152.000</startAddress><type>S</type></netBlock></netBlocks><handle>NET-149-112-152-0-2</handle><netName>TEST-NET</netName><originASes/><parentNetHandle>NET-149-112-152-0-1</parentNetHandle><registrationDate>2024-02-20T10:26:19-05:00</registrationDate><version>4</version></net></ticketedRequest>
```



**Need More  
Help?**

**ARIN's Help Desk:**

Voice: 7:00 AM – 7:00 PM ET

Chat: 10:00 AM – 4:00 PM ET

Monday through Friday

or **Ask ARIN in your ARIN  
Online account**

# Questions

Jon Worley  
jonw@arin.net

Have an idea for a  
webinar or training  
you would like to see?



Beverly Hicks  
training@arin.net