

The IP Analyser

Simplifying your IP Address Management



The IP Analyser

- RIPE NCC LIR Portal Application
 - <https://lirportal.ripe.net/ipanalyser/>
- Introduced March 2012 as beta service
- Shows an overview of:
 - All assignments made with your allocations
 - All available free space in your allocations
 - All invalid assignments that require your attention
- Very popular: >21,000 hits since launch

The IP Analyser

- Built from the ground up to replace ‘asused’ tool
- Fixes asused bugs, adds IPv6 support and more
- Suggests free space with conservation in mind
 - Same algorithm as IPRAs use...
- Warns about invalid assignments in UI and API
 - No longer need to contact IPRAs to get an overview

Thanks Raymond

Allocations (42)

✓ 62.142.0.0 - 62.142.255.255	85.5%
✓ 62.248.128.0 - 62.248.255.255	50.1%
✓ 80.81.160.0 - 80.81.191.255	83.2%
✓ 80.186.0.0 - 80.186.255.255	100%
✓ 81.197.0.0 - 81.197.255.255	100%
✓ 82.103.192.0 - 82.103.255.255	75%
✓ 82.118.192.0 - 82.118.223.255	93.4%
✓ 83.245.128.0 - 83.245.255.255	86.8%
✓ 84.230.0.0 - 84.231.255.255	56.3%
✓ 85.76.0.0 - 85.79.255.255	74.6%
✓ 85.156.0.0 - 85.156.255.255	100%
✓ 88.112.0.0 - 88.115.255.255	97.6%
✓ 91.152.0.0 - 91.159.255.255	62.5%
✓ 193.64.0.0 - 193.66.255.255	28.6%
✓ 193.94.0.0 - 193.94.255.255	43.1%
✓ 193.184.0.0 - 193.185.255.255	95.3%
✓ 193.199.0.0 - 193.199.255.255	0%
✓ 193.229.0.0 - 193.229.255.255	42.1%
✓ 194.86.0.0 - 194.86.255.255	72%
✓ 194.136.0.0 - 194.136.255.255	50.3%
✓ 194.157.0.0 - 194.157.255.255	61.5%
✓ 194.188.0.0 - 194.188.255.255	59.4%
✓ 194.211.0.0 - 194.211.255.255	75.1%
✓ 194.240.0.0 - 194.241.255.255	66.7%
✓ 195.16.192.0 - 195.16.223.255	81.4%



Please note that the width of the plotted bars is approximated to guarantee the best results in your browser.

Assignments (71)

Range	Registration date	Netname	Status
80.81.166.32/27	10/01/2002	IDOKYLPYHUONE-FI-NET	ASSIGNED_PA
80.81.168.112/28	14/09/2007	FI-SKANSKA-OYJ-NET	ASSIGNED_PA
80.81.170.0/24	20/11/2001	ETERRA-ASP-FI-NET	ASSIGNED_PA
80.81.166.128/27	02/04/2002	C3I-FI-NET	ASSIGNED_PA
80.81.189.192/27	08/12/2004	FI-NORDIC1-OY-NET	ASSIGNED_PA
80.81.165.96/28	27/08/2002	UTFORS-TOM-FI-NET	ASSIGNED_PA
80.81.183.0/24	27/01/2003	MPOLI-FI-NET	ASSIGNED_PA
80.81.165.32/28	07/02/2002	DELFOI-FI-NET	ASSIGNED_PA
80.81.168.144/28	13/09/2005	FI-WIRELESS-HOUSE-OY-NET	ASSIGNED_PA
80.81.168.32/27	11/07/2005	FI-OY-KARL-FAZER-AB-FAZER-AMICA-AB-NET	ASSIGNED_PA

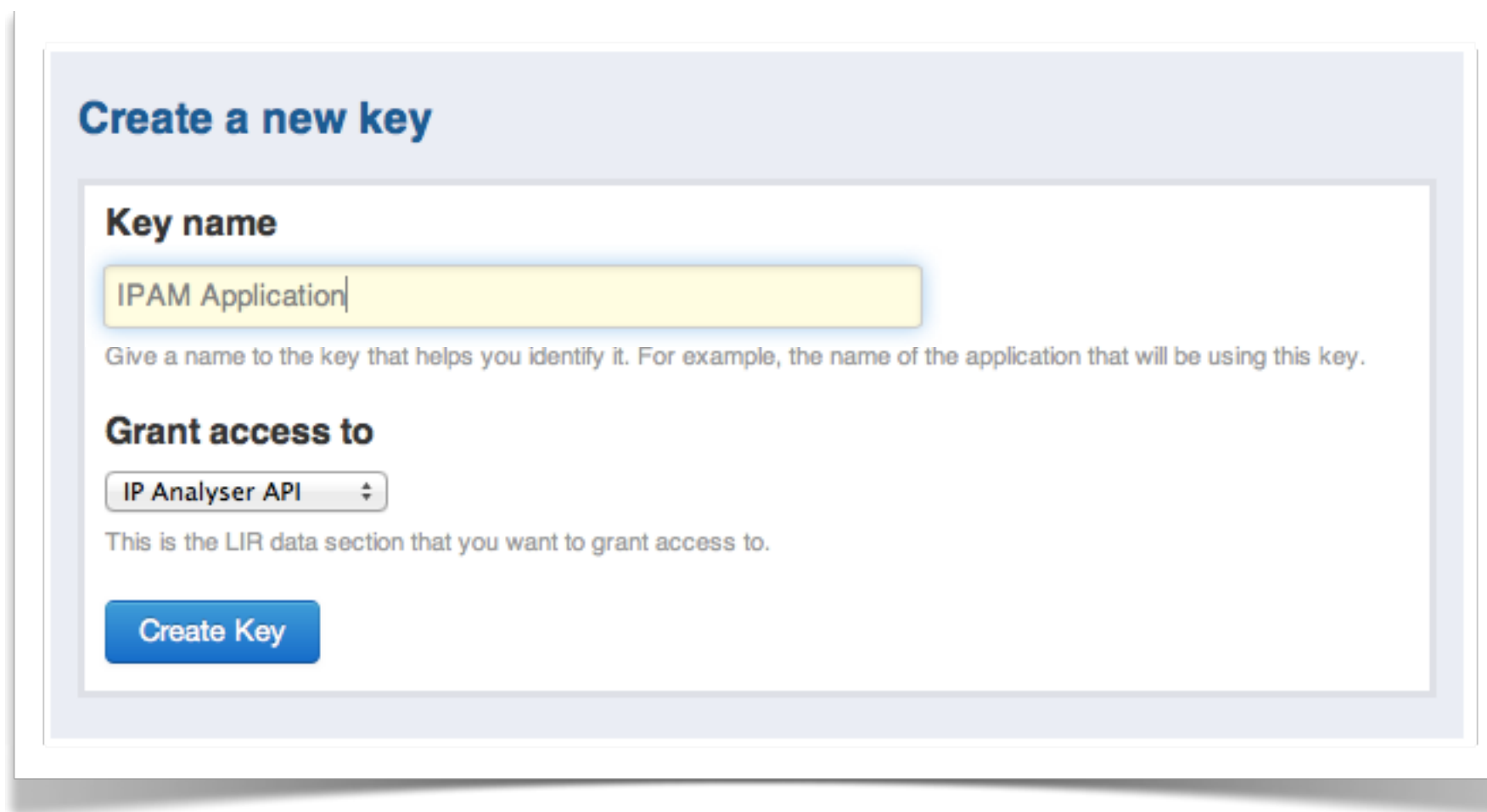
The IP Analyser API

- For larger organisations with lots of addresses
- Two formats: JSON and Plain text
 - Plain text uses the same format as ‘asused’ tool
- Simply grab your data using curl, wget, etc...
- Script around it, use in your local IPAM app

`$curl "https://lirportal.ripe.net/ipanalyser/v1/ipv4?key=your.key&format=JSON"`

The IP Analyser API

- To enable, create an API Access Key
 - Log into the LIR Portal with admin credentials
 - Click the **API Access Keys** item in the Tools menu



The screenshot shows a web form titled "Create a new key". It contains two main sections. The first section, "Key name", has a text input field with "IPAM Application" entered. Below the field is a hint: "Give a name to the key that helps you identify it. For example, the name of the application that will be using this key." The second section, "Grant access to", features a dropdown menu with "IP Analyser API" selected. Below the dropdown is another hint: "This is the LIR data section that you want to grant access to." At the bottom of the form is a blue button labeled "Create Key".

Examples (plain text, as used style)

Thanks Thomas

All assignments

Database Assignment	size	date	netname
82.219.194.144 – 82.219.194.159	16	20080314	EXA-NETWORKS-CLIENT-TSG
82.219.194.176 – 82.219.194.191	16	20081222	EXA-NETWORKS-CLIENT-TSG
82.219.209.216 – 82.219.209.223	8	20060711	EXA-NETWORKS-DON-VALLEY
82.219.10.80 – 82.219.10.95	16	20080313	EXA-NETWORKS-CLIENT-OPENSKIES
82.219.208.40 – 82.219.208.47	8	20040205	EXA-NETWORKS-ADSL-ZENON
82.219.9.64 – 82.219.9.79	16	20040212	EXA-NETWORKS-CLIENT-PROXCOM
82.219.13.80 – 82.219.13.95	16	20080313	EXA-NETWORKS-CLIENT-PROXCOM
82.219.208.104 – 82.219.208.111	8	20041029	EXA-NETWORKS-ADSL-SPORTS-SHOES
82.219.210.16 – 82.219.210.31	16	20041029	EXA-NETWORKS-ADSL-FROGTRADE
82.219.208.56 – 82.219.208.63	8	20041029	EXA-NETWORKS-ADSL-BOOTH
82.219.255.192 – 82.219.255.255	64	20120117	EXA-NETWORKS-CLIENT-LOCALPHONE
82.219.13.32 – 82.219.13.63	32	20080313	EXA-NETWORKS-CLIENT-LAWNSWOOD
82.219.208.224 – 82.219.208.231	8	20060124	EXA-NETWORKS-ADSL-MILLENIUM-

Examples (plain text, asused style)

Thanks Thomas

Free Address Space

Address range	size	
82.219.3.168 – 82.219.3.255	88	
82.219.6.0 – 82.219.7.255	512	/23 free range
82.219.3.136 – 82.219.3.159	24	
82.219.214.0 – 82.219.216.255	768	
82.219.195.64 – 82.219.195.111	48	
82.219.29.64 – 82.219.31.255	704	
82.219.194.160 – 82.219.194.175	16	/28 free range
82.219.194.224 – 82.219.194.255	32	/27 free range
82.219.205.32 – 82.219.207.255	736	
82.219.11.32 – 82.219.12.15	240	
82.219.204.168 – 82.219.204.175	8	/29 free range
82.219.3.80 – 82.219.3.95	16	/28 free range
82.219.40.0 – 82.219.191.255	38912	

Examples (plain text, as used style)

Thanks Thomas

Warnings

Invalid Netname(s)

Netname	Inetnum	Date	Size	Not	App	AW
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ERROR EXA-NETWORKS-HOTELS-IT

invalid	82.219.209.160 – 82.219.209.167	20060711	8		8	0
invalid	82.219.209.168 – 82.219.209.175	20060711	8		8	0
invalid	82.219.209.176 – 82.219.209.183	20060711	8		8	0
invalid	82.219.209.184 – 82.219.209.191	20060711	8		8	0

List of events for netname EXA-NETWORKS-HOTELS-IT

Date	Event	inetnum	size	App	Aw
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20031023	aw		0		
20031202	aw		64		

Example (JSON)

```
{
  "allocations": [
    {
      "assignments": [

      ],
      "range": "193.0.24.0/21",
      "status": "ALLOCATED PA",
      "violations": {
        "overlappingInetnums": [

        ],
        "ripeDbAllocationMismatch": [
          {
            "code": "RIPEDB_MISMATCH",
            "message": "Mismatch between RIPE DB allocation 193.0.24.0 –
                        193.0.31.255 with status ASSIGNED PI and Registry
                        allocation 193.0.24.0/21 with status ALLOCATED PA"
```

More to come...

- Refine User Interface, expand IPv6 support
- Active notifications of invalids
 - Supports Registry and RIPE DB data quality
- More integration with RIPE Database
 - Not just queries, also updates

Requests? Feedback?

One More Thing: The “My Resources” API

- Get all your resource data in JSON or XML:
 - Autonomous System Numbers
 - IPv4 and IPv6 Allocations
 - IPv4 and IPv6 PI Assignments
 - IPv4 Assignment Window history
 - IPv4 Approved Assignments
 - IPv4 Legacy Resources

Great for provisioning your IPAM app!

Documentation:
ripe.net/developers

Questions:
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