



IRT-Object in the RIPE-Database

Overview

Ulrich Kiermayr, ACOnet-CERT

RIPE 46 – Amsterdam, NL

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What does the IRT-Object do?

- Document **I**ncident **R**esponse **T**eams in the database
 - gives more information: PGP-Keys, ...
- more fine grained and scalable approach than 'abuse-c, security-c, spam-c,
- Link resources (inetnum, inet6num)
- only maintain one object



What does it look like?

```
irt:          IRT-JANET-CERT
address:     Atlas Centre
address:     Chilton
address:     DIDCOT, Oxon
address:     OX11 0QS  UK
phone:       +44 1235 822 340
fax-no:      +44 1235 822 398
e-mail:      cert@cert.ja.net
signature:   PGPKEY-836D7141
encryption:  PGPKEY-836D7141
admin-c:     AB2554-RIPE
tech-c:      RT644-RIPE
auth:        PGPKEY-3EA2BD2B
remarks:     JANET-CERT coordinates security in JANET.
remarks:     http://www.ja.net/cert/
remarks:     JANET is the UK education and research network.
irt-nfy:     ripe-admin@cert.ja.net
notify:      ripe-admin@cert.ja.net
mnt-by:      JANET-CERT
changed:     cert@cert.ja.net 20020808
source:      RIPE
```

Team's PGP-key used for signing

Team's PGP-key used for encryption

Team's PGP-key used to authenticate references

eMail Address to notify about references



What to do with it?

Attach the mnt-irt attribute to the resources:

- Requires authorization from both parties:
 - Maintainer of the resource
 - Signature of the IRT with the **auth**: PGP-Key
- Search for the most specific inet(6)num with a mnt-irt:

```
whois -c <IP-Addr>
```



Search without -c

```
[uk@worf AcoNet]$ whois -r -Tinetnum 193.171.255.0
```

```
inetnum:      193.171.255.0 - 193.171.255.95
netname:      ACONET-VIX-SERVICES
descr:        AConet Services Network
country:      AT
admin-c:      GW13-RIPE
admin-c:      AP135-RIPE
tech-c:       CP8-RIPE
status:       ASSIGNED PA
notify:       domain-admin@univie.ac.at
mnt-by:       AT-DOM-MNT
changed:      andreas.papst@univie.ac.at 19970324
changed:      Woeber@CC.UniVie.ac.at 19970328
source:       RIPE
```



Search with -c

```
[uk@worf AcoNet]$ whois -r -c -Tinetnum 193.171.255.0
```

```
inetnum:      193.170.0.0 - 193.171.255.255
netname:      AT-ACONET-193-170-193-171
descr:        ALLOCATED BLOCK
descr:        Provider Local Registry
descr:        AConet
country:      AT
admin-c:      WW144
tech-c:       WW144
tech-c:       WK42
tech-c:       CP8-RIPE
status:       ALLOCATED UNSPECIFIED
mnt-by:       RIPE-NCC-HM-MNT
mnt-lower:    ACONET-LIR-MNT
mnt-irt:      IRT-ACOnet-CERT
changed:      roderik@ripe.net 19950315
changed:      auto-dbm@ripe.net 19950424
changed:      hostmaster@ripe.net 19951229
changed:      hostmaster@ripe.net 20010206
changed:      hostmaster@ripe.net 20011018
source:       RIPE
```



How to get one?

- directly by RIPE-NCC (from ripe-254)
 - The creation request comes from the admin-c contact of the irt object.
 - The request is authenticated by an existing mntner, referenced by the object. The need to create an irt object cannot be the reason for mntner creation.
 - The keys referenced by the irt are in the database, the key owner shows affinity to the irt.
 - The reason for creation is presented along with the time line for deployment (i.e. referencing the object from where and when).



How to get one?

- By a well known trusted body recognized by the RIPE-NCC
 - Currently one: Trusted Introducer
<http://www.ti.terena.nl>
 - Object is maintained by the TI
 - Quality of data is assured by this body
 - Other groups possible: ISP associations, NRENs, ...



Example

```
[uk@worf AcoNet]$ whois -r irt-aconet-cert
```

```
irt:                IRT-ACOnet-CERT
address:            Vienna University Computer Center
address:            Universitaetsstrasse 7
address:            A-1010 Vienna
address:            AUSTRIA
phone:              +43 1 4277 14045
fax-no:             +43 1 4277 9140
e-mail:             cert@aco.net
signature:          PGPKEY-B06F5077
encryption:         PGPKEY-B06F5077
admin-c:            TI123-RIPE
tech-c:             TI123-RIPE
auth:              PGPKEY-B06F5077
remarks:            Emergency telephone number +43 1 4277 14045 (GMT+1/GMT+2 with DST)
remarks:            http://www.trusted-introducer.org/teams/aconet-cert.html
remarks:            This is an accredited IRT (level 2)
irt-nfy:            cert@aco.net
notify:             tiirt@stelvio.nl
notify:             cert@aco.net
mnt-by:             TRUSTED-INTRODUCER-MNT
changed:            gert-henk.bakker@stelvio.nl 20030813
source:            RIPE
```



Current Numbers

Total Objects: 39

Reference count:

irt-cert-nl: 312

IRT-ITGATE: 19

IRT-UNINETT-CERT: 18

IRT-ACOnet-CERT: 18

IRT-JANET-CERT: 7

IRT-EPLAN: 6

IRT-UK: 2



Open Issues

- Which other resources should be taggable?
 - AS-Numbers?
- Similar Facilities in other RIRs?
- Deployment
- Tools to get the information easily
- authenticity of the data in the database (general problem)



Resources

- ripe-254
<http://www.ripe.net/ripe/docs/irt-object.html>
- Ripe Database Manual
- Trusted Introducer <http://www.ti.terena.nl>



Q&A

Questions



Contact Information

Ulrich Kiermayr

Vienna University Computer Center / ACOnet
Universitätsstrasse 7
1010 Vienna, AT

Phone: +43 1 4277 14104

Fax: +43 1 4277 9140

eMail: ulrich.kiermayr@univie.ac.at

