



American Registry for Internet Numbers



SWIP IT



ARIN VII, Tutorial

The SWIP Template Tutorial

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- Purpose
- Definitions
- The What, Why, Where, When, Who, How of *SWIP*
- The *SWIP* Template
- Reminders
- Questions

Provide an overall understanding of the *SWIP* process.

Focus on the procedures for correctly completing the *SWIP* template.

ALLOCATION OF IP ADDRESS SPACE: Address space that may be reassigned. (e.g. ISP's)

ASSIGNMENT OF IP ADDRESS SPACE: Address space that cannot be reassigned. (e.g. End Users)

REASSIGNMENT: Term used to identify either an allocation or assignment.

PARENT ORGANIZATION: Organization that Allocates or Assigns.

CHILD ORGANIZATION: Organization that receives an Allocation or Assignment.

- A Maintainer ID, uniquely designates an organization and allows it to allocate or assign IP space to another organization.
- Maintainer ID will not be associated with an organization or record that has been **assigned (S)**.
- If the child's reassignment has been **assigned (S)** rather than **allocated (A)**, the child must ask its parent organization or upstream provider to send an email to reassign@arin.net requesting ARIN to assign a maintainer ID. The email should include: child company name and a list of IP addresses currently assigned to the child organization.
- A list of current maintainer ID's can be found at:
<ftp://ftp.arin.net/pub/swip/maintainer.list>

The

WHAT

WHY

WHERE

WHEN

WHO

HOW

Of SWIP

- Acronym for the **S**hared **W**ho **I**s **P**roject (RFC 1491)
- Process used by ISPs to submit reassignment information to ensure effective, efficient maintenance of records.

- Updates WHOIS to show which organization is using the assigned IP address space – this information is available for IP allocation studies.
- Allows operational personnel to see which organization is using the assigned address space and whom to contact in the event of operational and/or security problems.
- Tracks the utilization of a providers current net block allocations such that an additional allocation may be justified.

- Only available via ftp
- Template and instructions, in both English and Spanish, are found at:

<ftp://ftp.arin.net/pub/swip>

- Template only:

<ftp://ftp.arin.net/pub/swip/swip-template-1.4>

- Within seven (7) days of any reassignment of IP address space to downstream customers.
- Provide data on **NEW** reassignments /29 and larger.
- **DELETE** existing reassignments.
- **MODIFY** data on existing reassignments.

- Justification for all **allocations** and **assignments** of /19 blocks and larger **MUST** be submitted to ARIN for approval. X-Large ISP reassignment have limitations of /18 blocks and larger.
- A company must submit a *SWIP* template for any reassignments of a /29 block or larger.
- A company is not required to submit a *SWIP* template for /30 blocks and smaller.

- ISP's that receive IP allocations directly from ARIN.
- A downstream customer that has been **allocated** space from their upstream provider.

- Submit information via template to ARIN (reassign@arin.net)
- **NEW** - Batch processed nightly.
 - templates with errors are processed manually
- **DELETE** and **MODIFY** – Processed throughout the day.
- Turn around time at ARIN for processing *SWIP* templates is two to three business days.

The *SWIP* Template

The SWIP Template

```
---
MSU_version: 1.4
---

(N) new (M) modify (D) delete
(A) allocate (S) assign
---
ntname:
ntname:
ntname:
sig:
stlet:
strg:
state:
zipcode:
city:
state:

lname:
zipcode:
---
lname:
zipcode:
---
lname:
lname:
lname:
sig:
ntname:
strg:
state:
zipcode:
city:
phone:
idbox:
END OF FILE
```

WDB_version: 1.4

 Common Error:

- Header modified or removed from the template.

 Helpful Hint:

- When submitting **MORE THAN ONE** template per email, be sure to include the header above each template.

(N)new **(M)**modify **(D)**delete:

Identifies the action to be taken

 Common Error:

- Appropriate Letter is omitted.

 Helpful Hint:

- Only use **N**, **M**, or **D** to complete this field.

(A)allocate (S)assign:

Identifies the type of registration



Common Error:

- Incorrect letter provided.



Helpful Hints:

- Use **A** - if the organization will further reassign space.
(e.g. ISP's)
- Use **S** - if the organization will not further reassign space.
(e.g. End Users)

ntsnum:

ntenum:

Identifies the beginning and ending IP numbers of the reassigned block



Common Error:

- Typos.



Helpful Hint:

- Double check the number placed in this field.

ntname:

Database identifier for the netblock that you are reassigning.



Common Errors:

- Longer than 21 characters.
- Contains blank spaces.
- Contains characters other than letter, numbers, and hyphens (-).
- Begins with a number.



Helpful Hints:

- Make note of the Common Errors.

org:
street:
city:
state:
zipcode:

Be sure to complete the above fields with the child's appropriate information.



Helpful hint:

- If the organization is an individual who will be using the address space from their home, you may complete the *street:* field with **PRIVATE RESIDENCE**.

cntry:

Complete with the appropriate two character country code.



Common Errors:

- More than two characters. *Correct* = US, *Incorrect* = USA



Helpful Hints:

- A list of country codes can be found at:

<http://www.arin.net/regserv/countries.htm>

maint:

This field must be completed with the reassigning company's maintainer ID.



Common Errors:

- Completed with child's maintainer ID.



Helpful Hints:

- If you do not have a maintainer ID and need to *SWIP* you must go to your upstream provider, have them submit a request to ARIN for a maintainer ID to be associated with the appropriate blocks.

hname:
ipaddr:

Complete only if child will be maintaining their own inverse mapping.

 Common Errors:

- Completed when reassignment is smaller than a /24.
- Completed when parent block is larger than a /16.

 Helpful Hints:

- ARIN does not maintain inverse mapping for blocks smaller than a /24.
- Parent blocks of a /16 or larger are to maintain all inverse mapping for reassignments within their block.

nichandl:

Complete only if the desired technical contact has a registered POC (Point of Contact) handle.



Common Errors:

- -ARIN is omitted from the end of the handle.



Helpful Hints:

- If the technical contact has a *nichandl* you can leave the rest of the POC information fields blank.

Iname: Noc
fname: ARIN
mname: Eugene (**ALWAYS OPTIONAL**)
org: ARIN
street: 4506 Daly Drive
city: Chantilly
state: VA
zipcode: 20151
cntry: US
phne: 703-227-0660
mbox: hostmaster@arin.net

**All fields except
mname: are
optional when
nichandl is
completed**

END OF FILE

Must be removed when submitting more than one template per email.



Common Errors:

- Not removed from the bottom of *each* template when submitting more than one template per email.

Reminders

April 1 – 4, 2001

San Francisco, CA

- Missing header on top of *SWIP* Template.
- Reassigning space that has already been reassigned.
- *SWIP* block smaller than /29.
- Network Name
 - Duplicate Network Name -- name in use.
 - Longer than 21 characters in length.
 - Illegal characters used.

Missing or incorrect information:

- Incorrect country code – must be two character (ISO 3166).
<http://www.arin.net/regserv/countries.htm>
- Incorrect or no Maintainer ID.
- Non-existing POC handle.
- Missing “-ARIN” in the POC handle.
- Missing email box if *nichandle* is not provided.
- Missing Information from Required Fields.



Submit all SWIP templates via email in ASCII format, no attachments, no mime format.



Do not alter the established field names, spacing, or format when filling out the SWIP Template.



Do not change the template structure.



A parent organization must **Delete** the records of the old organization **BEFORE** **Reassigning** the same block, or a portion of that block to a new organization.



A parent organization need only complete the following six line items when deleting a reassignment:



- 1) Delete (**D**)
- 2) Allocation or Assign (**A** or **S**)
- 3) *ntsnum* (Starting Number)
- 4) *ntenum* (Ending Number)
- 5) *ntname* (Net Name)
- 6) *maint* (ID)



No more than 10 SWIP templates may be included in a single email.



Version header (**WDB_version:1.4**) must be at the beginning of each template and **ONLY ONE** end of file statement (**END OF FILE**) is to be placed at the end of the last template.



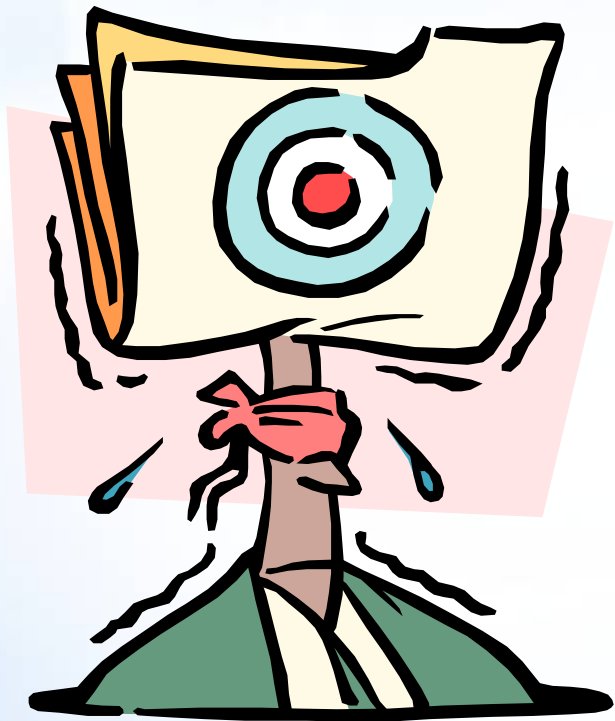
If you know the user handle, include it in the `<nichandl>` field and leave the rest of the user information blank.



ARIN does not maintain inverse mapping for reassignments smaller than /24.



All ISPs receiving a /16 or larger block of space (≥ 256 /24s) from ARIN will be responsible for maintaining all IN-ADDR.ARPA domain records for their respective customers.



Questions

reassign@arin.net
(703) 227-0660

Thank You