T1541 Validation and Registration Diagnostics

27 June 2003

1 Introduction

This document provides information on how to query the node database and retrieve registration and validation information for radios. This mechanism allows read-only access to the database. It is not possible to write information back to the database.

This feature operates in a similar way to the T1540 utilities "makeVasDb" and "viewru", but it is not the same. The output formats and the way in which the database is queried differ from the T1540 implementation.

1.1 Compatibility

This feature is available for T1541 node software version 2.1.8 and all later versions.

2 Validation Information

The command "taitnet viewval" with no parameters will return the validation information for all radios and groups in the node database. If the prefix/ident of a radio is appended as a parameter to this command, then the validation information for that radio will be returned.

2.1 Radio Validation Records

For each radio the information is returned in the following format:

MOBILE <prefix> <ident> <access> <allowedCalls> <tollBarIndex> <outphoneTableIndex> <allowedSites> <esn>

The following table describes the values for each parameter:

Parameter	Value
MOBILE	Literal string
<prefix>	3-digit prefix number (0 – 127)
<ident>	4-digit radio unit ident number (1 – 5999)
<access>	Access level (0 = Barred, 1 = Normal, 2 = Priority, 3 = Emergency)

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Parameter	Value
<allowedCalls>	Each of 14 binary digits represents the validation status (0=Not allowed, 1=allowed) for the following call types in order: Intersite, Individual speech to RU, Reserved, Individual speech to PABX, Individual speech to PSTN, NPD to RU, RU is suspended, Reserved, SDM to RU, Reserved, Status to RU, Reserved, Self Diversion
<tollBarIndex>	Toll Bar table number (0 – 9)
<outphoneTableIndex>	Outphone table number (0–31)
<allowedSites>	Each of 30 binary digits representing the validation status of the radio on the sites local to this node. The first digit represents the validation status of site 0 and the last digit represents the validation status of site 29. Each digit can have one of the following values: 0 = Not Allowed, 1 = Allowed.
<esn>	ESN number in the format <manufacturer's code>/ <model>/<serial number>

2.2 Group Validation Records

For each group the information is returned in the following format:

GROUP_SITES <prefix> <ident> <groupType> <repeatSignalling> <setupTime> <sites> <nodes>

The following table describes the values for each parameter:

Parameter	Value
GROUP_SITES	Literal string
<prefix>	3-digit radio unit prefix (0 – 127)
<ident>	4-digit radio unit ident (6000 – 8099)
<groupType>	Binary digit representing the mode of the group (0 = normal, 1 = registration based)
<repeatSignaling>	Binary digit representing the status of repeat signalling (0 = off, 1 = on)
<setupTime>	Setup time (1 – 50)
<sites>	Each of 30 single digits representing the validation status of the group on the sites local to this node. The first digit represents the validation status of site 0 and the last digit represents the validation status of site 29. Each digit can have one of the following values: 0 = Not Allowed, 1 = Allowed, 2 = Essential, 3 = Local Only, 4 = Originate Only.

Parameter	Value
\<nodes\>	Each of 30 single digits representing the validation status of the group across all nodes. The first digit represents the validation status of node 0 and the last digit represents the validation status of node 29. Each digit can have one of the following values: 0 = Not Allowed, 1 = Allowed, 2 = Essential.

2.3 Validation Examples

In the following example, all validation records are requested:

```
taitnet@scrooge:~ $ taitnet viewval

GROUP_SITES 000 6000 0 010 110000000000000000000000000000 000000000002012000000000000000100
GROUP_SITES 000 6001 1 010 000000000000000000000000000000 000000000000000100000000000000000
GROUP_SITES 000 6002 0 010 330000000000000000000000000000 000000000000000000000000000000000
GROUP_SITES 000 6003 0 010 110000000000000000000000000000 000000000000000100000000000000000
MOBILE 000 0005 0 1111110010101 00 00 000000000000000000000000000000 0/0/0
MOBILE 000 0006 0 1111110010101 00 00 110000000000000000000000000000 0/0/0
MOBILE 000 0007 0 1111110010101 00 00 000000000000000000000000000000 0/0/0
MOBILE 000 0008 0 1111110010101 00 00 000000000000000000000000000000 0/0/0
MOBILE 000 0009 0 1111110010101 00 00 110000000000000000000000000000 0/0/0
```

In the following example, the validation record for the radio unit 000-0003 is requested:

```
taitnet@scrooge:~ $ taitnet viewval 000-0003

MOBILE 000 0003 0 1111110010101 00 00 110000000000000000000000000000 0/0/0
```

3 Registration Information

The command "taitnet viewreg" with no parameters will return the registration information for all radios and groups in the node database. If the prefix/ident of a radio is appended as a parameter to this command, then the registration information for that radio will be returned.

For each radio the information is returned in the following format:

\<prefix\> \<ident\> \<Node n\> \<Site n\> [\<date\>]

The following table describes the values for each parameter:

Parameter	Value
\<prefix\>	3-digit radio unit prefix (0 – 127)
\<ident\>	4-digit radio unit ident (6000 – 8099)
\<node n\>	The number of the node that this radio last registered with
\<site n\>	The number of the site that this radio last registered with
\<date\>	The date and time when the radio last registered

3.1 Registration Example

In the following example, the registration record for the radio unit 000-0003 is requested:

```
taitnet@scrooge:~ $ taitnet viewreg 000-0003
000 0003 Node 11 Site 0 [Tue Jun  3 23:07:28 GMT 2003]
```

4 Issuing Authority

This TN was issued by: Matt Dean
                             Project Manager

5 Publication History

Publication Date	Author
27 June	SJ Glubb

6 Amendment Record

Publication Date	Page	Amendment