Name Standards for Volvo SNA Network Components

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ABSTRACT

The purpose of this paper is to document current naming conventions within the Volvo SNA network and its environment (system dataset naming etc).

The need for a document like this is obvious if you consider the requirements imposed by the network software used and the complexity of software maintenance in a distributed network, especially since most of the system related maintenance is done 'by' Volvo-Data.

The occurence of several versions of one subsystem within one node in the network places a need to formalize the names of both subsystems and their components, e.g. associated datasets.

This document does not contain a list over currently valid assignments. That information can be found in a separate document entitled 'VOLVO SNA NETWORK COMPONENT NAME LIST'.

Contents

Summary of amendments.

January 15, 1990.

The entire document has been refreshed after the Sleeping Beauty time for many years.

Notation used

Item

Standard

aabbzzxx

aa   ....

..   ..

Rationale

because of ....

In the prototype name (xxyyzz..) lowercase letters indicate substitute character positions and CAPITAL letters indicate fixed positions (i.e. should be written as shown).

Component name structure

The names of components and resources throughout the network are built up of several identities. Below is a list of these 'sub-identities'. They will be refered to throughout this document, as they comprise the full names of network components. Note that the examples given below are not exhaustive. Please refer to separate document 'VOLVO NETWORK COMPONENT NAME LIST' for a complete and valid list

hhhh   subsystem/serviceform type - IMS, CICS, TSO, HELP, CADM (cadam), JES2 (rjeservice), NJE (JES2 networking).

hh   short form of subsystem/serviceform - IM-ims, CI-cics, TS-tso, HE-help, CA-cadam, J2-jes2, NJ-nje.

jj   organisational/environmental identifier. This is the identification of the organisation, or the enviroment within an organisation if applicable - VD - Volvo Data , V1 - Volvo-Data (V1-env.), BM - VME, RS - Spare Parts division, LV - Trucks division, 86 - Volvo Indonesia etc.
Note that environment within an organisation is denoted here.

k   subsystem/serviceform subidentifier to make multiple copies possible - 1-9, A-Z allowed.

cc   Serial number 01-99 unique within each org/env.

nv   ncp id
n: physical ncp id (x, y, z,...),
v: version/variant of configuration.

uu   maintenance responsibility - F1 = Volvo-Data Gothenburg,

CPU naming rules

A clear distinction is made between a physical machine and a logical one. The physical machine is the actual hardware and is identified by its serial number. The logical machine is related to organisation/environment and consists of a number appended to the org/env id.

Physical CPU

Standard

mmmm-sss

mmmm   Model designation (e.g. 3090)

sss   Last three digits of CPU serial number

Rationale

Physical id is supposed to designate the physical hardware, and nothing else.

Logical CPU (or operating system)

Standard

jjcc

jj   Organisation/environment id

cc   Serial number 01-99 unique within each org/env.

Rationale

Logical id designates really an operating system, not a computer. Therefore a connection to a CPU model is unwanted, since an operating system might be run on any one of a number of computers. (Backup machines).

JES2 resources

These are routing resources. Used in JCL mostly.

NJE (Network Job Entry)

Standard

NJEjjk

jj   Organisation id.

k   subsystem/serviceform subidentifier

Rationale

This resource id should be used in JCL, etc. to route jobs to a certain environment for execution.

NJO (Network Job Output)

Standard

NJOjj
NJOnnnnn

jj   Organisation id.

nnnnn Serial number 00001 - 99999. Denotes a discrete output component (e.g. an RJE-stn). Could be located anywhere within the network. The physical connection is kept in JES2 tables.

Rationale

This resource id should be used in JCL, etc. to route output data to a certain environment. No change to JCL is needed if for example a printer is moved from one physical line to another.

Subsystem Datasets

The chief aim when establishing a networkwide standard for system data sets has been to ensure as far as possible, that the risk for duplicate names across the network be kept as low as possible. For some IBM-supplied datasets this cannot be avoided.

Standard

SYS1.anyname These datasets keep their original DS-names as supplied by IBM or by other vendors. Datasets that are Volvo node independent and are located on the sysres volume. They have to be cataloged in the master catalog.

uuhhjjk.anyname For datasets created/maintained by Volvo-Data.
They can be identical or unique for different nodes as to their contents.
They are not cataloged in the master catalog.

SYS3.uuhhjjk.anyname For datasets which fits the above description **and** have to be cataloged in the master catalog. This is the case for datasets accessible via the linklist, for instance.

Note: All distributed datasets are considered to belong to a subsystem.

uu   maintenance responsibility.

hh   short form of subsystem/serviceform type.

jj   organisation id.

k   subsystem/serviceform subidentifier

anyname   descriptive mnemonic, e.g. VTAMLST, LINKLIB, SRC (source code), OBJ (object code), LOAD (load-modules), PARM (other parameters)

Rationale

The standard takes into account the fact that subsystem datasets can be created and maintained by one node in the network, and subsequently be shipped to other nodes to make up a production environment there. Furthermore it must be possible, in case of an emergency, to rebuild the production environment of one node at another location without having to cope with duplicate dataset names. The risk of one updating the wrong dataset just because of an erroneous route-statement in a batch-job stream also demands some solution.

Software distribution from Volvo Data.

Involved in the process of distributing and maintaining software at Volvo Data's 'export-nodes', there are several types of libraries.

Distribution libraries.

- Index F0hhjj
- Base version.
- One set per release.

Installation libraries:

- Index F0hhjj
- In MEXNODE
- Only changes
- Maps production library

Production libraries

- Index Fxhhjj
- Run-time libraries
- Could reside at different nodes.
- F1hhjj at Mexpack nodes should not be changed other than from Volvo Data.

Test/Development libraries:

- Index F2hhjj
- For dept 2500's internal use.

Private datasets.

There is a need of 'private' datasets as well (like: libraries used to 'generate' subsystem-related software, maintenance tools etc). These should all be named:

F2hhjj.anyname   for subsystem/product-oriented datasets, or

userid.anyname   for 'individual-oriented' datasets.

userid   The security id (ACF2).

In existence today are datasets named F2xxxx.anyname and F1hhjjk, for 'private' use (ie F1STVD.initial.anyname or F1CIVD.initial.anyname), these should eventually be renamed to either one of the above.
(At least, no *more* indicies of the old kind).

Network item naming rules

Application.

major node

Standard

Ahhhhjjk

A	written as shown.
hhhh	subsystem/service form type, e.g. IMS, CICS,...
jj	organisation id, e.g. VD - Volvo Data, BM - Volvo BM,...
k	Subsystem/serviceform subidentifier. Should be 1 (one) for the first version of a subsystem within a node (org-id 'jj' above). For version two and up numbers '2 - 9' are assigned as needed, thereafter letters 'A - Z' are to be used.

Note: If there is only one version of a particular subsystem, within a mode, k may be omitted.

Minor node (or Subsystem Name)

Standard

hhhhjjk > if application has only one acb.
hhjjk999 > if application has more than one acb.
TSOjjk99 > for TSO only

hhhh	subsystem/serviceform type.
TSO	written as shown.
hh	short form of subsystem/serviceform type.
jj	organisation id.
k	subsystem/serviceform subidentifier
999	acb sequence number.
99	sequence number (01-FF hex4 f)

Rationale

A standard that matches appl major node name and also covers tso needs.

However, TAF (Terminal access facility) requires that 'minor prefix = major prefix', that's why TSO has a 'special' notation.

Acb name

Standard

Exactly the same as application minor node with three exceptions:
TSO> >for tso-tcas space.
TSO99999>for tso secondary spaces.
hhhh> > =HELP for the help application.

TSO   written as shown.

99999   sequence number within tso system.

HELP   written as shown.

Rationale

To get a 'predictable' naming convention except where the application software has specific requirements (TSO requires the above shown naming). The reason for HELP to have a 'nonstandard' name is that by entering 'HELP' at the terminal you should be logged on to the nearest HELP application but still have the possibility to log on to any help.

Note: The intention is that the application minor node name should be used for logon, thereby enabling V-D to move applications within the network without a need for the users to be aware of it. Therefore the possibility to log on using the acb name should be removed (using USS to scramble the logon id if it coincides with an acbname that is not equal to appl minor name) except for HELP.

Cdrm.

major node

Standard

CDRM

CDRM   written as shown.

Rationale

Standard fullfills all foreseeable needs: there can only be one cdrm major node per VTAM, it is not globally known. I.E. it can have the same name in all VTAM nodes.

Minor node

Standard

CDRMjjcc

CDRM written as shown.

jj organisation id.

cc cpu id.

Rationale

This standard can cope with large networks without confusion and will not lead to 'disaster' if large amounts of 43xx etc is connected to the network. It will also make it possible to associate the cdrm name with the cpu nickname (up to a resonable number of cpus).

Cdrsc.

Major node

Standard

Xhhhhjjk> for crossdomain applications.
Xjjcc>   for crossdomain devices.

X written as shown.

hhhh subsystem/serviceform type.

jjcc organisation and cpu id of owning cdrm/cpu.

k subsystem/serviceform subidentifier

Rationale

Xhhhhjjk fullfills all foreseeable needs

Note: - One cdrsc major node per application, never more than one minor in a list except for applications with multiple acbs like tso and vspc.

Ncp.

Major node

Standard

NCPn999 > for normal NCP.
PEPnv999 > for ncp with partitioned emulation.

n   3705 id.

999   subarea number, up to 256.

Rationale

It is good enough.

Line group

Standard

Gnlllm99

G   written as shown.

n   3705 id.

lll   line group type 1: BSC, SDL (-C), TTY, NTO, VTO (virtual
             sdlc for nto), SSS,...

m   line group type 2: L - leased, A - auto-answer, D - dial-out.

99   unique sequence within 3705.

Rationale

In order to avoid ambiguity since the group macro requires a label,
and since the group name is contained in display command output -
why not put some information in it.

line

Standard

tnlll

t   line type

             L   real line

             V   virtual line

             T   trunk line

n   3705 id.

| lll | line lib (hardware) address in 3705. |

Rationale

Makes life a little easier for the operators

Cluster/pu/dial port

Standard

tnllly9

tnlll	same as line name	
y	type	
	C	cluster (BSC)
	P	physical unit (SDLC)
	D	Start/stop dial port.
9	sequence number within line.	

Rationale

It is good enough.

LU (term not appl)

Standard

cxx99999

c	terminal class	
	R	3270-type (no difference between remote and local)
	P	programmable
	N	rje
	E	remote Start/stop.
xx	PTT country code of 3705 location (same as for normal phone services) except for sweden where it may be omitted (or 00 or 46).	
99999	unique number within 'xx' (i.e. no overlap between classes any more).	

Rationale

Note: The old standard with L as terminal class is allowed to die a natural death (in other words, its going to take some time to get rid of L as terminal class).

Local.

Major node

Standard

Huuujjk

H   (host attached) written as shown.

uuu   ucb (hardware) address.

jjk   organisation id and subsystem/serviceform subidentifier.

Rationale

'H' to avoid mistakes (interpreting it as an LU name). Another reason is to make it possible to run multiple cpu's using a single VTAMLST - data set.

SNA PU

Standard

Puuujjk

P   written as shown.

uuu   ucb (hardware) address.

jjk   organisation id and subsystem/serviceform subidentifier.

Rationale

Avoid misinterpreting as LU.

Switch-node.

Major node

Standard.

SWSDLjjk for normally owned nodes.
SWBUjjcc > for backing up another cpu (contains all sw-nodes of cpu jjcc).

SW   written as shown.

SDL   written as shown.

jjk   organisation id and subsystem/serviceform subidentifier.

SWBU		written as shown.
jjcc		id of backed up cpu.

Minor node (pu)

Standard

PUSDLC99

PU	written as shown.
SDLC	written as shown.
99	sequence characters (alfa).

Rationale

Standard functions all right

Uss tables

Standard

USStttt

USS	written as shown.
tttt	device type: 3277, 3278, 3276, 3287, S34,.. etc (Could be USSdppx if data stream compatibility in 8100 DPPX/DPCX) calls for it.)

Rationale

Remove any cpu dependencies. Eventual need for differences will be by device type. Enable use of unique device features. Differences between models of the same device type is handled by logmode meaning mode table entry (enabling moving terminals around).

Logmode.

Tables

Standard

MTtttt

MT	written as shown.
tttt	resource type: 3277, 3278, 3276, 3287, MEMO, APPC,... etc

Rationale

Compatible with USS table name.

Table entry names

Standard

Mm > for overriding default model.

Default logmode are NORM.

M   (for model) written as shown.

m   model number.

Rationale

Gives a logic structure (in conjunction with Uss and mode table names).

Path definition member names

Standard

PATHSAxx > ...

PATHSA   written as shown.

xx   VTAM's subarea number.