1115

Bell Laboratories

subject: **NROFF/TROFF Formatting Codes for Departmental Organization Directories on PWB/UNIX**
Case: 39373-99

date: **September 1, 1976**

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PY 9141
1B-112 x7315

MEMORANDUM FOR FILE

1. INTRODUCTION

This memo describes a PWB/UNIX documentation facility for departmental organization directories. Keeping these directories on UNIX has the following advantages:

- ease of correction,
- no need to retype an entire chart to make updates,
- ability to move lines within a chart and from one chart to another.

2. MACRO DESCRIPTIONS

The data for a chart is entered into a UNIX file, one file per department. There is a particular two-letter code for each employee classification. Following each two-letter code (a *macro* in UNIX jargon) are the employee's last name and initials, the name the person goes by (first name or nickname), room number, and telephone extension. There are additional macros for the date, department name and number, groups within the department, special symbols which may be added to certain lines, and notes that explain the symbols.

2.1 Codes for Employees

A line for each employee must be typed as follows:

.*xx* **last-name-and-initials first-name room extension**

where .*xx* is the two-letter code for one of the following occupational classifications:[1]

.DH	Department Head	**.BA**	Business Systems Analyst
.DS	Department Secretary	**.BS**	Business Systems Specialist
.SV	Supervisor	**.GC**	General Clerk
.MT	Member of Technical Staff	**.SC**	Service Clerk
.AM	Associate Member of Technical Staff	**.SS**	Senior Service Clerk
.ST	Senior Technical Associate	**.AI**	Staff Aide
.TA	Technical Associate	**.CO**	Computer Equipment Operator
.LA	Lab Assistant	**.RV**	Resident Visitor
.MG	Member of Administrative Group	**.AS**	Acting Supervisor

In all the macros, one or more blanks are used to separate the different items (the *arguments*) specified for the macro. If blanks are to appear within an argument (e.g., to separate the last name from the initials), the tilde (~) character must be typed in place of the blanks, or the entire argument must be enclosed within double quotes. For example, if Mary Ann Jones is a supervisor in some department, the data line for her could look like:

1. Other codes can be implemented if necessary.

.SV Jones,~M.~A. Mary~Ann 4A-900 1234

or

.SV "Jones, M. A." Mary~Ann 4A-900 1234

or any of the other combinations.

The third argument is the room number. If it is necessary to specify a location code before the room number, it must be entered as follows: the location code, a right curly bracket, and the room number.

For example:

.MT "Hurtz, G. Howitt" Howie MH}7E-302 6516
.MG "Lename, S. P." Sam PY}4A-241 7721

Omitted arguments in the middle of the line are indicated by two adjacent double quote characters. Arguments omitted at the end of the line can be simply left out.

For example:

.MT "Stone, K. A." "" 4A-800 7888
.RV "Thomas, A. B."

Indentation levels are automatically provided for the different classifications. Department heads and supervisors are aligned on the left margin. Secretaries, MTSs, AMTSs, MAGs, RVs, and Business Systems personnel are indented two positions from the left. LAs, TAs, and STAs are indented four positions. Clerks, staff aides, and computer operators are indented six positions. The amount of indentation is fixed and cannot be changed by the user. All indentation may be inhibited by the user.

Each employee classification has an associated numerical code and job title, which may be printed on the chart by specifying a certain option (see below). For exceptional cases (e.g., a supervisor who is not a BTL employee, a department head who is also serving as a supervisor), the default job title may not be correct. For these cases, two additional arguments must be included in the data line for that person. The fifth argument must be a colon (:). The sixth argument must be the code and title as it is to appear. If blanks occur in this argument, they must be typed as tildes, or the argument must be enclosed within double quotes.

2.2 Date

.DT date

Normally, the current date appears on the chart in the form of mo/dy/yr. To specify a particular date, supply the desired date as the argument to the .DT macro. This macro, if used, must be the first macro in the file.

2.3 Department Number and Name

.DN number dept-name

This macro specifies the department number and its name. Blanks in the name must be typed as tildes, or the name must be enclosed within double quotes. This macro must either immediately follow the .DT macro or be the first macro in a department file.

If several department files are being processed at the same time, the .DN macro causes the directory for the new department to begin on a new page.

2.4 Group Names

.GR name

This macro specifies the name of a group within a department. This macro must precede all members included in the group. Lines within a group will be kept as a block and will not be split across two pages. If blanks occur within the group name, they must be typed as tildes, or the name must be enclosed within double quotes.

2.5 Special Symbols

.SY symbol

This macro provides for the addition of special symbols at the beginning of any line containing a person's name. This macro is placed just before the macro of the employee for whom the special symbol is intended.

Certain predefined special symbols may be coded in the argument to this macro. These symbols are:

*(DA	for	†	(dagger)
*(DD	for	‡	(double dagger)
*(CT	for	¢	(cent sign)
*(AT	for	@	(at sign)
*(SH	for	#	(sharp or pound sign)
*(BU	for	•	(bullet)

For example:

```
.CO "Lename, S. P." Sam 5A-141 7788
.SY \*(BU
.CO "Wilson, K. L." Larry 5A-141 7778
```

will appear as

Lename, S. P. (Sam)	5A-141 x7788
•Wilson, K. L. (Larry)	5A-141 x7778

Note that more than one special symbol may be coded as the argument to the .SY macro.

3. TABLE OF NOTES

.NS

The .NS macro (note start) denotes the beginning of a table of data that can be used to explain any special symbols used in the chart. Each line after this macro should contain one of the special symbols, a tab character, and the symbol's explanation. Lines after the .NS are treated as a block and will not be printed across two pages.

3.1 Final Macro

.NE

The last macro in a file of data for a department must be .NE (note end). It *must* be present *even if no .NS macro occurs.*

4. STRUCTURE OF DATA WITHIN A FILE

In a file for a department, the lines of data must be structured in the following way. The .DT (if desired), .DN, .DH, and .DS macros must occur first and in that order. Then for each group, there must be the sequence of .GR, followed by .SV, followed by the members of that group. .NE must be the last macro. The .SY macro may appear before any employee classification macro.

Attachment #1 is an example of a possible department file. Attachment #2 shows the resulting output.

5. OBTAINING OUTPUT

Directories are printed on a terminal with the command:

nroff –morg options files ...

For those with access to a Graphics System phototypesetter, the command:

troff –morg options files ...

will print the directories.

Different types of output are provided by the selection of certain options:

–rR1 employee classification RV will be printed.

–rT1 numerical codes and job titles will be printed.

–rI1 indentation for the different classifications (2, 4, or 6 spaces) is *inhibited.* That is, no indentation will occur.

–rS1 any .SY macros (special symbols) will be *ignored.*

–rN1 the note table at the bottom of the chart will be *suppressed.* This option automatically invokes the –rS1 option.

PY-9141-DWS-mr **D. W. Smith**

Atts.

Copy (with att.) to
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Attachment #1

```
.DT 9/7/84
.DN 9387 "Some Arbitrary Department"
.DH "Busch K J" Ken RR}5C-170 4380
.DH "" "" PY}1B-105 6361
.SY \*(AT
.DS "Smith E C" Edie RR}5C-171 4381
.GR "Systems Analysis and Development"
.SV Dolotta~T~A Ted PY}1A-101 7984
.MT "Licwinko J S" John PY}1B-112 6539
.MG "Piskorik E M" Elaine PY}1A-118 4421
.SC "Prescott C" Cynthia PY}1A-135 6176
.SY \*(BU
.SC Rivera~M Margarita PY}1A-135 7995
.MT "Roome W D" Bill PY}1B-118 7317
.GR "Systems Development and Analysis"
.SV Boehm~E~W Earl 4A-102 6344
.SY \*(AT
.SC Braxton~L Linda 4A-119 4049
.SY \*(CT
.RV Hanna~W Bill 4A-101 7882
.LA Karl~J~W~III John 4A-130 6309
.TA "McIntyre W D" Bill 4A-101 6150
.MT Mihalik~G~S George 4A-101 6865
.SY \*(CT
.RV Prostine~R~U Bob 1B-109 4163
.SY \*(AT
.SC Rennicks~C~G Clara 4A-101 6935
.SY \*(CT
.RV "Schumm D B" Dave 1B-140 6089
.LA Smiecinski~F~R Phil 4A-101 6550
.GR Other~Information
.MT System~A "" 5A-200 4300
.MT System~B "" 5A-200 4250
.MT System~C ""  MH}7F-300 7100
.MT System~C "" PY}5A-200 6546
.MT System~D "" 5A-200 4200
.NS
\*(AT⊙reports to Dept. 7134
\*(CT⊙resident visitor
\*(BU⊙changed location
.NE
```

Note: ⊙ is a tab character.

9/7/84

9387—Some Arbitrary Department

Busch K J (Ken) *Head*	RR 5C-170	x4380
	PY 1B-105	x6361
@Smith E C (Edie) *Secretary*	RR 5C-171	x4381
Systems Analysis and Development		
Dolotta T A (Ted)	PY 1A-101	x7984
Licwinko J S (John)	PY 1B-112	x6539
Piskorik E M (Elaine)	PY 1A-118	x4421
Prescott C (Cynthia)	PY 1A-135	x6176
●Rivera M (Margarita)	PY 1A-135	x7995
Roome W D (Bill)	PY 1B-118	x7317
Systems Development and Analysis		
Boehm E W (Earl)	4A-102	x6344
@Braxton L (Linda)	4A-119	x4049
¢Hanna W (Bill)	4A-101	x7882
Karl J W III (John)	4A-130	x6309
McIntyre W D (Bill)	4A-101	x6150
Mihalik G S (George)	4A-101	x6865
¢Prostine R U (Bob)	1B-109	x4163
@Rennicks C G (Clara)	4A-101	x6935
¢Schumm D B (Dave)	1B-140	x6089
Smiecinski F R (Phil)	4A-101	x6550
Other Information		
System A	5A-200	x4300
System B	5A-200	x4250
System C	MH 7F-300	x7100
System C	PY 5A-200	x6546
System D	5A-200	x4200

@ reports to Dept. 7134
¢ resident visitor
● changed location