Trying the journal system in the new NLS.

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(J23693) 29=JUL=74 19:07;;;; Title: Author(s): Geoffrey S. Goodfellow/GSG; Distribution: /GSG([ACTION]); Sub=Collections: NIC; Clerk: GSG;

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Trying the journal system in the new NLS.

This is a try to use the new journal system that is currently available in the new version of nls. It is mearly for practce,

(J23694) 29=JUL=74 19:23;;;; Title: Author(s): James E. (Jim)
White/JEW; Distribution: /sRI=ARC([INFO=ONLY]) ; sub=Collections:
SRI=ARC; Clerk: JEW; Origin: < WHITE, PCPDSGN.NLS;31, >,
29=JUL=74 19:16 JEW ;;;; ####;

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For those interested in contributing to the design of the protocol to be used in the NLS split. This document is incomplete and unpolished, but should indicate the direction in which I'm headed. Now is the time to offer suggestions.

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Multi=Environment Software System	1
The Multi=Environment Software System (or MESS) is a collection of "procedures" and "data item" partitioned among some arbitrary	
number of "environments" (e.g., forks or hosts).	1a
Environments	1b
An environment is a collection of procedures and data items which share a common host machine, instruction set, operating system, and so forth; and a single program counter (PC),	161
With its own PC, an environment is capable of running in parallel with other environments, but may also volunteer to run for a time in synchrony with another environment as a	
coroutine,	162

Procedures

A procedure is a named body of executable code residing within a particular environment. A procedure in one environment is said to be "internal" to that environment and "external" to every other environment.

A procedure can call other procedures, both internal and external. The mechanism for calling an internal procedure is environment=dependent and of no concern to the MESS as a whole. External procedures are called by means of the inter=environment protocol (IEP) described in this paper.

In principle, procedures can be interlinked without regard for the environments in which they reside. It is perfectly legitimate, for example, for procedure p1 in environment A to call procedure p2 in environment B which itself calls procedure p3 in environment A before returning to p1. Any conceivable interlinking of environments is possible.

However, in practice the programmer should assume that calling an external procedure is more expensive (in terms of both the real and processing time required) than calling an internal procedure (an operation which may be as simple as a single machine instruction). The process of partitioning the system among environments should therefore be done with intelligence and care.

Not every procedure within an environment need be callable from other environments. A procedure that CAN be called from an environment other than its own is said to be "accessible" to them; all other procedures are said to be "inaccessible".

A procedure accepts zero or more data items as formal parameters or "arguments", and returns to its caller zero or more data items as "results". Arguments for and results of external procedures are passed by value, rather than by name. Hence, procedure "results" cannot be returned by way of modified arguments.

A procedure is often understood by its caller to either succeed or fail at its task. The outcome indication can be communicated to the caller via a particular procedure result or global data item, or in some other way agreed upon by both caller and callee. A standard method, called "signalling", of indicating the failure of an external procedure is provided throughout the MESS, and its use is encouraged. An external procedure that signals a failure returns to its caller a

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program=readable error code and a human=readable diagnostic message, in lieu of the normal procedure results.

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Data Items

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A data item is a named data store, usually occupying some portion of an environment's address space. A data item in one environment is said to be "internal" to that environment and "external" to every other environment,

Local data items accessible from within and existing only during a single use of a procedure serve as temporary storage for that procedure. Global data items accessible to every procedure within the environment record environment state information. Only global data items can be external.

No data items exist which are global to the whole system. As will become apparent, however, a MESS can be constructed in such a way that (for example) data items v1, v2, and v3 in environments E1, E2, and E3, respectively, are always identical.

A procedure can manipulate both internal and external data items. The mechanism for manipulating an internal data item is environment=dependent and of no concern to the MESS as a whole, External data items are manipulated by means of the IEP.

Not every data item within an environment need be manipulable from other environments. A data item that CAN be manipulated from an environment other than its own is said to be "accessible" from other environments; all other data items are said to be "inaccessible",

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Inter=Environment Protocol Design Working Paper JEW 30 JUL 74 7:34PM

Interlinking Environments

At any point in time, a MESS is a tree structure of environments, Every MESS begins with a single "root" environment to which all other environments are ultimately subordinate. During the course of its execution, the root environment creates zero or more subordinate environments, one or more of which may create subordinate environment(s) of its own, and so forth.

An environment is said to be the "direct inferior" of the environment that created it, and the "indirect inferior" of each environment further up in the environment tree,

An environment is said to be the "direct superior" of each environment it creates, and the "indirect superior" of each environment further down in the tree,

An environment may have, at any point in time, an arbitrary number of directly inferior environments, but only one directly superior environment,

A superior creates an inferior in order to invoke one or more of its external procedures. After its services have been used, the inferior environment may be deleted.

A procedure may call any accessible procedure in any of its environment's directly inferior environments, or in its directly superior environment. Additionally, a procedure may call any accessible procedure in any of its environment's indirectly inferior or superior procedures, provided that the environment has been made "known" to the caller's environment,

An environment is referred to via an "environment identifier", or VID. A VID is a local handle to an environment, and is always evaluated relative to the environment in which it is defined. The special VIDs SELF and SUPER are always known in every environment, and designate the environment and its direct superior, respectively. A VID is assigned to each directly inferior environment as it is created. VIDs for indirectly inferior or superior environments must be explicitly obtained via the sGETHND primitive.

An environment and its directly inferior environment will, in the most frequent case, be related as user and server, respectively. That is, the former will view the latter as a

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resource == a set of procedures to be used in furtherance of some higher=level objective.

A more complicated relationship between superior and inferior is one in which an external procedure called from the superior responds, during the course of its execution, with one or more calls to procedures in the superior. By this means, the inferior can in effect return very complex "results" to its caller,

More complicated still is a system in which a procedure calls another procedure in one of its environment's indirect inferiors or superiors. No useful examples of such a system come to mind.

Not only can an environment call procedures in any environment known to it, but it can also apply other, support primitives to any such environment. The root primitive can therefore apply debug primitives, for example, to any environment in the system, no matter how deeply hidden in the tree.

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IEP Functions	1 É
The IEP described in this paper provides mechanisms for the following:	1f1
 creating and deleting environments transferring control between environments transmitting arguments and results between an external 	1fia 1fib
procedure and its caller	1f1c
5) reporting external events to environments	1fie





User Primitives	2
Introduction	2a
Below is a list of the primitives to be made available, in a environment=dependent fashion (probably as procedure calls in most cases), within each environment in the MESS. Each primitive is described in the following form;	2a1
Terse statement of primitive's function	2a1a
name=of=primitive (arguments => results)	2a1a1
Verbose description of the primitive's function, the arguments it requires, and the results it returns.	2a1a2
Support operations:	2a1a3
A list of the IEP exchanges required to support the user primitive,	2a1a3a
Every primitive described below, with the exception of SCALL itself, is implemented by means of the SCALL primitive. That is,	2a2
sSETBRK (vid, addr, pedent)	2a2a
for example, is basically just shorthand for:	2a3
sCALL (SETBRK, vid, addr, pcdcnt).	2a3a

Environment Manipulation	25
Create an environment	261
sCRTEVM (envname => vid)	2b1a
This primitive attaches an instance of the environment named ENVNAME as an inferior of the calling environment. The primitive returns VID as a handle to the newly=created environment.	2515
Login to an evironment	262
SLOGIN (vid, user, password, acct)	2b2a
This primitive associates the user USER and the account ACCT (both protected by the password PASSWORD) with the environment identified by VID. The implications of the association are environment dependent; it may affect the environment's ability to use its file system, the billing of the environment's use, and so forth;	2525
Obtain access to a subset of an environment's procedures and data items	263
sSETACC (vid, accname)	2b3a
This primitive makes the set of procedures and data items named by ACCNAME in the environment identified by VID, accessible to the calling environment. Some sets of procedures and data items may be restricted, and access to them may be obtainable (via SSETACC) only after a priviledged user has been associated with the environment (via sLOGIN).	2b3b
Delete an environment	264
SDELEVM (vid)	2b4a
This primitive detaches the environment identified by VID from the calling environment, to which the deleted environment must be directly inferior,	2646
Obtain a handle for an environment	265
\$GETHND (supervid, targetvid => vid)	2b5a
This primitive obtains, for the calling environment, a	



handle VID to an environment which is inferor, but not directly inferior, to it (e.g., the environment might be directly inferior to an inferior of the calling environment). The environment is identified by specifying the handle TARGETVID by which the environment is known to its superior, which is known in turn to the calling environment as SUPERVID. Once a handle to it has been obtained, the environment is known to the calling environment and can be manipulated as if it were a direct 2b5b inferior. Release handle for an environment 266 2b6a SRELHND (vid) This primitive releases the environment handle VID previously obtained with sGETHND, After the handle is released, the environment is no longer known to the calling 2b6b environment. Freeze an environment 267 2b7a sFRZEVM (vid) This primitive suspends execution of the environment identified by VID (and all of its inferior environments). 2b7b 268 Thaw an environment 2b8a STHWEVM (vid) This primitive resumes execution of the environment identified by VID (and all of its inferior environments), 2b8b previously frozen with sFRZEVM. 269 Map system structure 2b9a sMAPSYS (vid, depth => map) This primitive depicts for the calling environment, the structure of a subset of the system's tree of environments. The desired subset is indicated by specifying a handle VID which denotes the topmost environment to be considered, and the depth DEPTH of the depiction relative to the topmost 2b9b environment.

Procedure Calls	2c
Obtain list of environment's accessible procedures	2c1
SPRCMENU (vid => prclist)	201a
prelist _ proci, arglisti, reslisti,	2c1a1
This primitive obtains from the environment identified by VID a list PRCLIST of its accessible procedures and their calling sequences,	2c1b
Call an external procedure	202
<pre>sCALL (procname, vid, arg1,argn, terms => cmplstatus, res1,resn)</pre>	2c2a
This primitive causes the procedure PROCNAME in the environment identifed by VID to be called with arguments ARG1 through ARGN, RES1 through RESN represent the results returned by the procedure. TERMS is a set of flags which specify the mode in which the procedure is to be executed;	2c2b
BGNBLK == this procedure call is the first in a block of procedures to be acknowledged with a single return ENDBLK == this procedure call is the last in a block of procedures to be acknowledged with a single return ASYNCH == this procedure is to be executed asynchronously	2c2b1 2c2b2 2c2b2 2c2b3
CMPLSTATUS specifies the interpretation to be attached to RES1 through RESN;	2020
RETURN == the procedure has returned; RES1 through RESN are its results SIGNAL == the procedure has signalled; RES1 is the signal code and RES2 is the diagnostic message BRKPNT == a breakpoint has been reached; RES1 is the vid of the environment containing the breakpoint, and RES2 is	2c2c1 2c2c2
the address within that environment of the breakpointed instruction	2c2c3
Obtain list of environment's accessible data items	203
SDATMENU (vid => datalist)	2c3a
This primitive obtains from the environment identified by VID a list DATALIST of its accessible data items and their types,	2c3b

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Read external data item	204
<pre>sRDDAT (vid, dataname => dataval)</pre>	2c4a
This primitive returns the value DATAVAL of the accessible data item DATANAME in the environment identified by VID.	2c4b
Write external data item	205
sWRDAT (vid, dataname, dataval)	2c5a
This primitive assigns a new value DATAVAL to the accessible data item DATANAME in the environment identified by VID	2c5b
Create temporary external data item	206
sCRTIMP (vid, tmpname, tmptype)	206a
This primitive creates in the environment identified by VID, the temporary data item TMPNAME accessible to the calling environment, TMPTYPE specifies the type of data item to be created, Once created, the temporary data item can be used and manipulated like any other external data item,	2065
Delete temporary external data item	207
sDELTMP (vid, tmpname)	2c7a
This primitive deletes the temporary data item previously created in the environment identified by VID via sCRTTMP,	2¢7b
Notify environment of an external event	208
sPOST (vid, eventname)	208a
This primitive communicates the occurence of an external, asynchronous event EVENTNAME (e.g. the expiration of a timer or the typing of an interrupt character) to the environment	2005
Identified by VID,	Scop

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Debugging	2d
Address Space Manipulation	2d1
Read external address space	2d1a
<pre>sRDCORE (vid, addr, wrdcnt, coremode => corelist)</pre>	2d1a1
This primitive retrieves (and returns as CORELIST) the current contents of a contiguous block of cells in the address space of the environment identified by VID, ADDR is the address of the first cell whose contents are requested; WRDCNT indicates the number of cells to be returned, COREMODE specifies the form in which the requested information is to be presented;	2d1a2
TEXT by interpreting the cell block as text	2d1a2a
instruction INTEGER == by interpreting each cell as an integer	2d1a2b 2d1a2c
sequence of size=bit bytes FLTENT == by interpreting each cell as a	2d1a2d
floating=point number misc == other, environment=dependent interpretations	2d1a2e 2d1a2f
Write external address space	2d1b
swRCORE (vid, addr, wrdcnt, coremode, corelist)	2d1b1
This primitive stores CORELIST in a contiguous block of cells in the address space of the environment identified by VID. ADDR is the address of the first cell whose contents are to be modified; WRDCNT indicates the number of cells to be modified. COREMODE specifies the form in which the requested information is to be interpreted (as in \$RDCORE).	24162
Read external accumulators	2dic
sRDREGS (vid, reg, regent, coremode => reglist)	24101
This primitive retrieves (and returns as REGLIST) the current contents of a contiguous block of accumulators in the environment identified by VID. REG is the name of the first accumulator whose contents are requested;	

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returned, COREMODE specifies the form in which the requested information is to be presented (as in SRDCORE)	2d1c2
Write external accumulators	2d1d
sWRREGS (vid, reg, regent, coremode => reglist)	2d1d1
This primitive stores REGLIST in a contiguous block of accumulators in the environment identified by VID, REG is the name of the first accumulator whose contents is to be modified; REGCNT indicates the number of accumulators to be modified. COREMODE specifies the form in which the requested information is to be interpreted (as in	
SRDCORE),	2d1d2
Search external address space	2d1e
<pre>sSRCH (vid, addr, wrdcnt, srchmode, ptrn => addrlist)</pre>	2d1e1
This primitive searches, within a contiguous block of cells in the address space of the environment identified by VID, for cells conforming to the pattern PTRN, and returns a list of their addresses. The cell block to be searched is WRDCNT cells in length and begins with cell ADDR, SRCHMODE specified the kind of search to be performed, and the proper interpretation of PTRN:	2d1e2
ADDR == search for an instruction whose effective address is PTRN	2d1e2a

symbol Table Manipulation	2d2
Open external symbol table	2d2a
sOpSYMT (vid, tblname)	2d2a1
This procedure makes known to the calling environment the symbols contained in the symbol table TBLNAME in the environment identified by VID'.	2d2a2
Close external symbol table	2d2b
SCLSYMT (vid, tblname)	2d2b1
This procedure makes UNknown to the calling environment the symbols contained in the symbol table TBLNAME (previously opened with sOPSYMT) in the environment identified by VID.	2d2b2
Create external symbol	2d2c
sCRTSYM (vid, tbiname, symname, symval)	2d2c1
This Primitive adds the symbol SYMNAME to the previously=opened symbol table TBLNAME in the environment identifed by VID, and assigns it the value SYMVAL.	2d2c2
Delete external symbol	2d2d
sDELSYM (vid, symname)	2d2d1
This primitive deletes the symbol SYMNAME from the previously=opened symbol table TBLNAME in the environment identifed by VID.	2d2d2
Read value of external symbol	2d2e
sVALSYM (vid, symname => symval)	2d2e1
This primitive returns the value of the symbol SYMNAME known to the environment identified by VID,	2d2e2
Write value of external symbol	2d2f
sSETSYM (vid, symname, symval)	2d2f1
This primitive assigns to the symbol SYMNAME known to the environment identified by VID, the value SYMVAL,	2d2f2

Breakpoint Manipulation	2d3
Create external breakpoint	2d3a
SSETBRK (vid, addr, pcdcnt)	2d3a1
This primitive sets a breakpoint at address ADDR in the address space of the environment identified by VID, which suspends execution of the environment the PCDCNTth time the environment's PC reaches ADDR,	2d3a2
Delete external breakpoint(s)	2d3b
SREMBRK (vid [,addr])	2d3b1
This primitive removes the breakpoint previously set at address ADDR in the address space of the environment identified by VID. If ADDR is absent, all breakpoints set by the calling environment in environment VID are removed.	2d3b2
Proceed after suspend or external breakpoint	2d3c
sRESUME (vid (,addr))	2d3c1
This primitive resumes execution of the environment identified by VID, currenty suspended at a breakpoint, If ADDR is present, the environment's PC is set to ADDR before execution of the environment is resumed,	2d3c2

Miscellaneous	2d4
Execute external intruction	2d4a
SEX (vid, inst)	2d4a1
This primitive executes the single instruction INST in the environment identified by VID,	2d4a2
Obtain environment characteristics	2d4b
SEVMCHR (vid => size, wrdlen, regcnt)	2d4b1
This primitive returns characteristic information about the environment identified by VID: the number SIZE of cells in its address space, the width WRDLEN of each cell in bits, and the number of accumulators it possesses.	24462





Summary	2e
Basic primitives	2e1
Manipulating environments	2e1a
SCRIEVM (envname => vid)	2e1a1
SDELEVM (vid)	2e1a2
sseTACC (vid, accname)	2e1a3
SLOGIN (vid, user, password, acct)	2e1a4
Calling external procedures	2e1b
sprcMENU (vid => prclist)	2e1b1
<pre>sDATMENU (vid => datalist)</pre>	2e1b2
<pre>sCALL (vid, procname, arg1,argn, terms => cmplstatus, res1,resn)</pre>	2e1b3
Manipulating external data items	2e1c
<pre>sRDDAT (vid, dataname => dataval)</pre>	2eici
swRDAT (vid, dataname, dataval)	2eic2
SCRITMP (vid, tmpname, tmptype)	2e1c3
SDELTMP (vid, tmpname)	2e1c4
Reporting external events	2e1d
spost (vid, eventname)	2e1d1
Additional primitives for complex systems	2e2
SMAPSYS (vid, depth => map)	2e2a
SGETHND (supervid, targetvid => vid)	2e2b
sRELHND (vid)	2e2c
SFRZEVM (vid)	2e2d
STHWEVM (vid)	2e2e

Debugging primitives	2e3
Manipulating external address spaces and accumulators	2e3a
<pre>srDCORE (vid, addr, wrdcnt, coremode => corelist)</pre>	2e3a1
swRCORE (vid, addr, wrdcnt, coremode, corelist)	2e3a2
<pre>sRDREGS (vid, reg, regent, coremode => reglist)</pre>	2e3a3
SWRREGS (vid, reg, regent, coremode => reglist)	2e3a4
<pre>ssRCH (vid, addr, wrdcnt, srchmode, ptrn => addr11st)</pre>	2e3a5
Basic symbol manipulation	2e3b
sVALSYM (vid, symname => symval)	2e3b1
Additional primitives for more complex symbol manipulation	2e3c
SOPSYMT (vid, tblname)	2e3c1
sCLSYMT (vid, tblname)	2e3c2
SCRTSYM (vid, tblname, symname, symval)	2e3c3
SDELSYM (vid, symname)	2e3c4
SSETSYM (vid, symname, symval)	2e3c5
Breakpoints	2e3d
sSETBRK (vid, addr, pcdcnt)	2e3d1
SREMBRK (vid [,addr])	2e3d2
SRESUME (vid [,addr])	2e3d3
Miscellaneous	2e3e
SEX (vid, inst)	2e3e1
SEVMCHR (vid => size, wrdlen, regcnt)	2e3e2

Data Types

Arguments passed to or results return by an external procedure, and external data items manipulated, all must be encoded for inter=environment transfer as part of the IEP. In order to do this, the types of arguments that a procedure can require of external callers must be ientified. In so doing, we are enumerating the kinds of data items which can be transferred between environments, and not the ways in which a data item can be represented in transit between environments.

We define the following types of data items:

STR (string) == a text string, with both a current and a3b1maximum length3b1INT (fixed=point integer == a signed integer3b2WRD (memory cell) == an unsigned integer3b3RUC (structure) == a complex data items requiring an explicit3b4

We define the following operations upon data items:

ADR (address) == a WRD data item whose value is the address of another data item FLD (field) == s specified portion of another data item

The value of a data item, regardless of its type, can be communicated between (source and destination) environments in either of the following ways:

LITERAL == by simply stating its value

DATA ITEM REFERENCE == by stating that its value is identical to that of some data item (possibly a temporary data item, in which, for example, a result of a previous procedure may have been stored), in the destination environment, to which the source environment has access

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Inter-Environment Protocol

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Inter=Environment Communication	4a
In beginning to define IEP, we make some assumptions about the mechanisms available for inter-environment communication (IEC). First we assume that the desired communication cannot be achieved with simply machine instructions, since it is that assumption which makes the MESS a multi-environment system to begin with. Any additional assumptions we make must have the following characteristics:	4a1
 they must be true with respect to the two known potential applications of IEP == a multi=fork and a multi=host system, and 	4a1a
2) IEP must be implementable using the resulting IEC.	4a1b
***	4a2
	4b



You have new journal mail just lied to me.

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(J23697) 29=JUL=74 22:35;;;; Title: Author(s): Kirk E, Kelley/KIRK; Distribution; /HGL([ACTION]) JDH([ACTION]) HGL([INFO=ONLY]) JDH([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: KIRK;

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You have new journal mail just lied to me.

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I had already seen that mail and my "action" and "info" branch had no new mail,

HGL 30=JUL=74 09:49 23700

Dumps During Prime Time

(J23700) 30-JUL=74 09:49;;;; Title: Author(s): Harvey G. Lehtman/HGL; Distribution: /RWW([ACTION]) JCN([ACTION]) DCE([ACTION]) CHI([ACTION]) DVN([INFO=ONLY]) KIRK([INFO=ONLY]) JDH([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: HGL;

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Dumps During Prime Time

Last night Dave and I were trying to debug the new Journal system, several people were doing document production, and someone was tryig to do FORTRAN development. None of us had much success inasmuch as the load average at 9:30 PM was 10! The reason was the fact that a DUMP was being done (and is done as general policy now at this prime time) and was assigned 50% of the system. This strikes me as being counterproductive since the load is pretty awful during the day anyway. Why was the old policy changed?

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HGL 30=JUL=74 10:00 23701 You Oughta Be in Pictures: Filming in the Console Room Wednesday, 31=JUL=74 in morning

(J23701) 30-JUL=74 10:00;;;; Title: Author(s): Harvey G. Lehtman/HGL; Distribution: /SRI=ARC([ACTION]); Sub=Collections: SRI=ARC; Clerk: HGL;

16.

HGL 30=JUL=74 10:00 23701 You Oughta Be in Pictures: Filming in the Console Room Wednesday, 31=JUL=74 in morning

Zev Pressman will be here on Wednesday morning to film some environment shots of our cnsole room for addition to the film Charles and Don used at the NCC. Elizabeth and I will be using the resulting new film for our respective talks very soon. We need the cooperation of YOU to make these short segments a success. We understand there may be some inconvenience, but expect it to be minimal. Setup of the lights and movement of the terminals should take at most two hours; the actual filming should take at most 1/2 hour. Durig the filming, you may be asked to stay at your terminal to assure continuity and color. You may even be asked to do something dumb like walk across the room with a code book. If you do not wish to participate, be forewarned and stay away, but we hope you will there. Thanks, HGL

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DCE 30=JUL=74 10:21 23702

SRI and a DDPCs Community

(J23702) 30=JUL=74 10:21;;;; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /DVN([INFO=ONLY]) BC([INFO=ONLY]) DRB([INFO=ONLY]) TLH([INFO=ONLY]) JCN([INFO=ONLY]) RWW([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: DCE; Origin: <ENGELBART>DDPCS.NLS;3, 6=MAR=74 12:29 DCE ;####; SRI and a DDPCS Community

Recording a memo from 6 Mar 74 (Engelbart, DDPCS,) that has been discussed with Cox, Brown, Van Nouhuys, Expect to develop and discuss further,

DCE 30=JUL=74 10:21 23702

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SRI and a DDPCS Community

This is a first draft toward producing an explicit thinkpiece (proposal) about a multi-client program that SRI could promote, aimed at cooperatively evolving (for the Comunity's own use) a set of Augmented Knowledge Workshop (AKW) techniques specially designed to facilitate the development, production, and control of documentation.

This DDPCS Community (for Document Development Production and Control System) would be a part of the larger set of special=interest communities, the collection of which I've been calling the Bootstrap Community (BC).

Among all of communities in BC there would be a good deal of mutual contribution to the technical improvements, application methodology, evaluation, and continuing evolution of the "core AKW" == i.e. facilitating the core or basic sorts of operations common to almost any type of knowledge work.

Each special=interest community would extend the AKW system into some particular knowledge=work domain that would be of value to the others (which is the essential criterion for being part of the "Bootstrap" Community) but for which the special interests and capabilities of that community would give it the most impetus and relevant contribution.

General working arrangements within the community of participating organizations:

Each participant becomes a client of our AKW Utility, buying initially a minimal amount of Utility support,

The computer service is piped into a location of their choosing, in their own premises. They acquire a representative set of terminals with which to exercise different capabilities of the service system.

See the proposal to Bell of Canada, cited at the end of this paper, for a representative description of the Utility's services and contract provisions. Both the services and the contract provisions are expected to evolve,

Suitable people in the participant's organization must serve respectively as Workshop Architect and as Management Liaison, and they must be provided with time to learn and to participate,

The Workshop Architect does not serve as a computer or hardware developer; his architectural concern is with the "user system," the organization, roles, methods, knowledge, skills, etc, that can increase effectiveness when served by the computer and communication services, via terminal hardware, SRI and a DDPCS Community



Via the Utility subscription, the architect receives continuing training and technical support for doing his job -- indeed, many of the basic AKW techniques provided in the Utility service are oriented to help him do his work. Generally, the architect will be responsible for training all other users in his organization.

There is a specially organized working group out in the community at large, composed soley of workshop architects. Special services in the Utility service effectively support the inter=communication and collaboration among the architects. The basic design of the BC relies upon a continuing, close and effective collaborative relationship within this organization of architects == the work of each architect is expected to be much facilitated thereby.

The Management Liaison, a member of the participating organization's management structure, is essentially the internal promoter of the exploration and possible application of AKW techniques.

There will be an organization of these management=liaison persons. When the community stabilizes, this group will come to be the body that regulates the joint business matters, negotiates among themselves for development funds and objectives, negotiates for better buys in Computer services, equipment, etc.

(To obtain resources for continuing evolution of the common=venture system, it is assumed that the participants contribute into a development fund == via taxation, subscription, or some reasonable arrangement.)

Three central roles in the community are involed;

Service Utility == the role providing computer services, training, and application counseling, is served by the Knowldge Workshop Utility (or simply Utility) that is already an established SRI business (and is highly expandable). Someday the community could decide to get this service in some other way, but in te initial design, it will be the SRI managed Utility.

Community Nucleator == the person or group that initially promotes membership, stimulates and coordinates its 3b1a

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organization, and sets it on its course. Eventually this role becomes totally subservient to the organization of Management Liaison persons, who will run the community's business, but the initial launching is viewed as being a package that the Nucleator is selling, with some stipulation as to when control changes hands.

Community Architect == the architect of the "community knowledge workshop," In the "collaborative community" design it is planned for there to be a significant amount of community communication and business constantly going on, Included in the basic Utility services are powerful tools designed to facilitate these processes; the community needs to adopt organization, method, conventions, etc. to harness these. These latter will evolve considerably as the community matures in its experience, purpose, and skills, and it is the role of the Community's "knowledge=workshop" Architect to set up the collaboration system and guide its evolution. (In my paper, 12445,> there is a detailed discussion of the sequence of community=oriented services that can be thus involved, See the reference at the end of this paper.)

Other, general features of the community;

We would expect either initially, or very soon, that within a given participant's organization a small, early=prototype group of people would begin using their Utility resources in some purposeful operations, mainly for gaining initial experience,

One part of the technique development will be aimed at steadily cutting the costs of system use, and improving the means for mapping the sytem into different hardware and operating systems, interfacing to different terminals and printing devices, facilitating the updating and maintenance, etc. The assumption would be that Community members will track the improvements of the system, and also that they will have an increasing range of individual choice as to the means by which they provide themselves with computer services while still using the "standard, evolving DDPCS".

A seemingly sensible sequence of extensions to the initial service system are readily mapped out: e.g., spelling checker (more or less available now); tabular=data arrays; extending the character set to handle math symbols, equations, etc; introducing line graphics (to provide for charts, graphs, function plots, etc.), multiple=pass document compiler, etc.

The basic features planned in the Bootstrap Community would also operate here -= i.e. that the Knowledge Workshop Architect's



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Community (specially formed to provide constant, close collaboration and support for all of the KW Architects in all of the special communities) would be supported in such a way as to make highly effective the technical collaboration among participating clients. For instance, people can work in close, daily association (as is being demonstrated now within our already forming community).

This feature provides a highly unique aspect here that no other multi=client venture could have before now; a feature that can be a prototype for a revolution in the way that complex systems will be developed in the future, and that complex problems will be handled among many distributed and diverse parties. In itself this aspect is an important "experiment", and it provides not a little payoff to the clientele to be gaining experience in such collaborative techniques.

But besides it just being unique, and providing valuable experience, the collaboratiive support offered in these communities really does provide a very significant new payoff element. It brings a really significant new degree of closeness to the distribued groups that the coordination among them, in sharing ideas and experiences, in collaborating over analysis, and over plans and designs for improving the system, for setting standards, etc., that a truly new degree of payoff can result from entering int cooperation.

A significant element in promoting interest in participating would be the concurrent work that can probably directly (or at leat very easily) be mapped into the special community's domain from what ARPA is (we assume) going to be supporting in its MST Program (and probably also in its Software Production Technology Program, and later in its Command Control Communications Program) == and of course in the hopefully growing umber of other applications activities.

Should note here that RADC has just started seriously looking into the use of NLS and the Output Processor (to COM) for producing a very large technical document. Also note the ongoing process of collaborative dialogue between their architect and our guys.

As the base of Bootstrap=community participants grows, there will be a powerful snowballing effect. The larger the base, the more advantage is gained by joining, and the easier it is to enlist new participants. We already have an appreciable start here == a truly advanced system, a Utility, an approach, 4d2

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a core clientele; with significant participation in MSTP we'd gain a great deal more impetus.

The giants in the knowledge=system business == IBM and Xerox for instance == may indeed emerge with systems that meet the need, and would make a potential participant seriously wonder if he ought to wait and buy what they bring out. My intuition is that we can really offer something better than that; it would be important to begin examining this issue. (If indeed we couldn't offer better, I'm not sure that I'd be interested in pursuing the Bootstrap Community development.)

The approach I envision would be constantly adaptive to user needs;

It would constantly be evaluating components, sub-systems, indeed whole systems, that are commercially available; when advantageous, these would be integrated into the evolving whole system. Competition would exist in sub-areas, which fosters steady evolution toward whole-system optimization. To have to buy either one whole system from either one manufacturer or another, as systems get ever large, locks a consumer out from gaining advantage of important innovations.

And, there would be parallel constant evaluation of parts of the existing system, and merciless retirement from the recommended configuration when superseded.

The extra feature of "augmenting the collaborative processes of improving the tools and methods" is to me highly promising. The effectiveness of the process, if enhanced even a small amount, would in a relatively few years lead to a significantly better overmall system.

The launching process:

SRI could formulate a package, based upon a sort of extension of the AKW Utility subscription, with a specified starting state for the characteristics of the DDPCS offered (e.g. like it is now); then do some market testing to see what the potential seems to be. If there would seem to be even two hopefuls, it might well be worth starting with them. If more, good == don't see any limiting number, really == in fact, some definite advantages in enrolling a very large community.

For membership in a DDPCS Community, it would be best to seek out organizations with the following basic characteristics:

Developing, producing, and controlling documentation is a

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significant activity. The more significant the better. Assumedly there should be special payoff for some of the immediately available benefits of NLS, such as turn-around speed, distributed collaboration, linking, two-dimensional editing and viewing, etc., so that the relatively high startup costs of using NLS in pilot application provides at least some special payoff (although it really wouldn't have to be cost effective at the outset still to be a smart investment).

A good=prospect organization would need to be progressive enough to see the mid=range payoff, and to basically buy the over=all argument about inevitability, pervasiveness, heavy impact, very=high eventual payoff, long=term evolutionary program requirement, etc.

ALso, an organization having high potential interest in the other areas of AKW applicability would have a better long=term inducement.

I picture that Bechtel Corporation would be a good prospect: large, expanding right now, operations all over the world to coodinate and solve problems for, fast and flexible coordination of many parties in preparing proposals undoubtedly important, records and documents also seemingly of constant basic importance, they don't really care about having proprietary locks on basic tools whose development they contribute to (I'd assume), Lockheed, hp, might be other corporations; many government agencies.

There would be many advantages in multi-participant cooperation here:

It is too expensive to carry the system through to where it is obviously going, for a single rganization to do alone if it doesn't have to. Dick McQuillan, a founder of Composition Technology Inc in Cambridge, whose company now serves clients with an impressive brand of computer aided transcription and typesetting (handling material with complex math symbols), agreed that the cost of continuing development along the above set of stages would be too much for any one organization.

The costs of doing steady, effective analysis, within an application domain large enough to be meaningful, on processes that still are being shaken down and that aren't yet really cost effective, would be rough to bear alone == lots of cost ineffective expense just to get meaningful analytic data. But spread among many organizations, it presents a different picture. Each organization will get very large returns from having a central core of its people gaining experience, so



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there is extra payoff from at least this core group's being provided these services. The multiple interests and evaluative approaches taken by the differrent members, collaborating in their analysis and in their decisions as to how to invest joint resources for continuing development and analysis, would very much enrich the process. There would be more sharply focussed talent distributed among the core exploratory groups of the many participating organizations than would be found if just one organization went after the process with one monolithic project.

I would hope that particular consideration of the possibility of pursing this DDPCS Community venture could be brought into the picture immediately within SRI. I think that the approach taken in doing the study for SRI's own internal DDPCS would be very sensibly affected if there were a serious possibility seen for SRI's doing this.

For instance, it would make a great deal of sense for SRI, if it were to assess the Community approach favorably, to arrange for its internal investment in a DDPCS to be really a very neat double=return investment; set up its own serious DDPCS nucleus activity, using the AKW Utility approach, then balance the investment of resources it might otherwise spend on a solo development venture between getting a serious pilot operation going and enlisting a helpful group of participants who will share the subsequent evolutionary costs.

I would think that no matter what technology were selected as being best for SRI's own DDPCS approach, a cooperative community development scheme would be well worth considering. Adding to this consideration the extra advantages offered the community approach by using our AKW base instead of System X == the augmented collaboration support, and the already existing community core (especially ARPA's MSTP, which apparently assumes good DDPCS capabilities will be essential) == and it looks irresistible to me.

Background info:

Patterning some of the Community processes after the APT Program, as decribed by Dave Brandin, is worth considering.

Apparently there is a growing and continuing pressure toward computerized documentation in government contracts for complex systems, I've heard talk of possibly writing such into contract requirements.

Information International Inc. (who have the best COM for mixed

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text nd graphics) have just landed a very big contract (I think with the Navy) to do automatic scanning and processing to convert existing hard-copy documents of certain types to computeized form, then to re-output them on their Comp-80 photo-compositer. They have been in the high-precision film scanning business for over ten years.

References:

D. C. Engelbart, COORDINATED INFORMATION SERVICES for a DISCIPLINE= OR MISSION=ORIENTED COMMUNITY, paper presented at the Second Annual Computer Communications Conference, San Jose, California, 24 January 1973, (Journal, dated 12 Dec 72 == 12445.)

J. C. Norton, R. W. Watson, WORKSHOP UTILITY SERVICE FOR THE USE OF KNOWLEDGE WORKSHOP TECHNOLOGY, Technical Proposal to Bell Canada, SRI No. ISC 73=147, October 8, 1973 (Journal == 19250,)

GSG 30=JUL=74 18:00 23703

Subroutines in FTPDRV

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(J23703) 30=JUL=74 18:00;;;; Title: Author(s): Geoffrey S. Goodfellow/GSG; Distribution: /JEW([ACTION]) ; Sub=Collections: NIC; Clerk: GSG;

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Subroutines in FTPDRV

Jim, I have seen that usualy there is a "Not Logged In" because some how ftpdry doesn't seem to make it the first time "round when its tries for an ICP. Therefore I concluded that the network must not be fully ready to eccept it, and am trying to have it go to sleep for 30 secs or so when the system, is brought up for things to get a chance to settle down. I have no problem putting the sleep code in, but was unable to complie it, as there seem to be some special subroutines that aren't in the ftpdry source. I would apprecite it if you could point me at them so as I can give this new idea a try. ==Geoff



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(J23704) 31=JUL=74 08:58;;;; Title: Author(s): Dirk H. Van Nouhuys, Jeanne M. Beck, Kirk E. Kelley/DVN JMB KIRK; Distribution: /DSM([ACTION]) CHI([ACTION]) HGL([ACTION]) DIRT([INFO=ONLY]); Sub=Collections: DIRT DPCS SRI=ARC; Clerk; DVN; Origin: < VANNOUHUYS, QD0CFEC.NLS;2, >, 31=JUL=74 08:54 DVN ;;;;####;

Effects of Command Changes:	1
Documentation would like to provide to new users of new NLS at Office=1 a TNLS Cue card, a Primer which shows basic text creation and Sendmail in TNLS, a general Command Syntax, a Description of the Differences between old and new NLS, and a dictionary=like document derived from the Help Data base that we are calling the NLS User's Glossary.	1a
The plex below lists the items from the top two priority levels of (journal,23692,) that must be frozen to finish each document,	16
Branch 2 gives a trim but reasonable Documentation Production Schedule, After each document in branch one is the date from the schedule when the subject matter needs to be frozen to meet the documentation schedule,	10
Cuecard (August 2)	1 d
Help Command Language, not mentioned in (23692)	1d1
(1a1) =020= =035= Help instead of or in addition to Goto Help, Make the command Help available from any subsystem (feedback,fdbk,01104)	1 d 2
(1a1) Make the user dialog better for the "output to terminal" command and add an output to file option which outputs to a sequential file from the output processor,	143
<pre>(2a2) =062= Typing "U before an address was also disliked by many. The preferred prompt would be B:/A:. (feedback,fdbk,02664), (feedback,fdbk,02777), (feedback,fdbk,02790</pre>	1d4
(2b1) =021 New Command Print File CA	1d5
(2b1) =022= New command; "print rest <ca>" (constrained as in proposed "print file" command) equivalent to and replacing current "print <ca>"</ca></ca>	1d6
(2bi) =044# It seems inconsistent that in Sendmail you type "SH" to do (Sh)ow Status but anywhere else you would have to type "SHS" for (Sh)ow (S)tatus, (feedback,fdbk,03340) i.e Change "Status" to a Command word in Sendmail and in the Ident subsystems,	1d7
(2b1) =068= needs further study = Editor subsystem is too big resulting in unnecessary alphabetic conflicts, Suggested replacement: Editor, File=Handler, and Terminal Handler, See	

(kudlick,newsubs,1:why) for a preliminary description; a more up=to=date description is forthcoming, Development will study this proposal and make a recommendation;	148
(2b1) change the SENDMAIL Command DONE to "SEND (the mail)"	1d9
(2b1) change the SENDMAIL Commands SEND FOR ACTION and SEND for INFO to D[istribute] A[ction (copies to)] and D[istribute] I[nformation (copies to)]	1d10
imer (Freeze August 9)	10
<pre>(2a2) =062= Typing "U before an address was also disliked by many. The preferred prompt would be B:/A:. (feedback,fdbk,02664), (feedback,fdbk,02777), (feedback,fdbk,02790</pre>	, 1e1
(2b1) =022= New command: "print rest <ca>" (constrained as in proposed "print file" command) equivalent to and replacing current "print <ca>"</ca></ca>	1e2
(2b1) =072= Expert=expert should not be the default recognition for new users, (feedback,fdbk,02714)	1e3
(2b1) change the SENDMAIL Command DONE to "SEND (the mail)"	1e4
(2b1) change the SENDMAIL Commands SEND FOR ACTION and SEND for INFO to D[istribute] A[ction (copies to)] and D[istribute] I[nformation (copies to)]	1e5
ntax and Description (Freeze Augusst 30th) of Differences reeze August 9)	11
Help Command Language, not mentioned in (23692)	111
<pre>(1a1) =020= =035= Help instead of or in addition to Goto Help, Make the command Help available from any subsystem (feedback,fdbk,01104)</pre>	1f2
<pre>(1a1) =020= =035= Help instead of or in addition to Goto Help, Make the command Help available from any subsystem (feedback,fdbk,01104)</pre>	113
(1ai) Make the user dialog better for the "output to terminal" command and add an output to file option which outputs to a sequential file from the output processor,	1f4
(2a2) =062= New definistions of SSEL,DSEL,LSEL	1£5

DVN JMB KIRK 31=JUL=74 08:58 23704

Schedule and Schedule Needs for Documentation of New NLS at Office=1

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(2b1) =021= Print File CA	116
(2b1) =022= New command: "print rest <ca>" (constrained as in proposed "print file" command) equivalent to and replacing current "print <ca>"</ca></ca>	1£7
(2b1) =044= It seems inconsistent that in Sendmail you type "SH" to do (Sh)ow Status but anywhere else you would have to type "SHS" for (Sh)ow (S)tatus, (feedback,fdbk,03340) i.e Change "Status" to a Command word in Sendmail and in the Ident subsystems,	118
<pre>(2b1) =052= Have an option in Output Quickprint to put NO heading on any pages except for the string "Page #" at top=right on each page, (feedback,fdbk,03263) i.e. implement option and change CML to be O[utput] Q[uickprint] (OK / N[o headers] (OK / REST) / REST); where REST = C[opies] / F[ile] / A[ppend] ;</pre>	119
(2bi) =068= needs further study = Editor subsystem is too big resulting in unnecessary alphabetic conflicts. Suggested replacement: Editor, File=Handler, and Terminal Handler. See (kudlick,newsubs,i:why) for a preliminary description; a more up=to=date description is forthcoming. Development will study this proposal and make a recommendation.	1£10
(2b1) =072= Expert=expert should not be the default recognition for new users, (feedback,fdbk,02714)	1111
(2b1) Change the CML to replace the entities "window" and "boundary" by the single entity "edge", i.e. S[plit window] H[orizontally] will become I[nsert] E[dge] etc.	1112
(2b1) change the SENDMAIL Command DONE to "SEND (the mail)"	1113
(2b1) change the SENDMAIL Commands SEND FOR ACTION and SEND for INFO to D[istribute] A[ction (copies to)] and D[istribute] I[nformation (copies to)]	1f14
User Glossary (Freeze August 23th)	19
Help Command Language,not mentioned in (23692)	191
<pre>(1ai) =020= =035= Help instead of or in addition to Goto Help, Make the command Help available from any subsystem (feedback,fdbk,01104)</pre>	192
(1a1) Make the user dialog better for the "output to terminal"	

DVN JMB KIRK 31=JUL=74 08:58 23704

Schedule and Schedule Needs for Documentation of New NLS at Office=1

command and add an output to file option which outputs to a sequential file from the output processor.	193
(2a2) =053= Must have simple DEX available in new nls:	1g4
(2a2) =062= New Definitions for LSEL, DSEL, SSEL	195
(2b1) =021= Print File <ca> command</ca>	196
(2a2) =094= Altmode should cause filename recognition for a file in Programs directory without typing programs first when loading a program, (feedback,fdbk,03018)	197
(2b1) =019= In Print Structure commands, when a link with viewspecs is used as a_n address, the viewspecs should affect the printout, (feedback,fdbk,03273)	198
(2b1) =022= New command: "print rest <ca>" (constrained as in proposed "print file" command) equivalent to and replacing current "print <ca>"</ca></ca>	199
(2b1) =044= It seems inconsistent that in Sendmail you type "SH" to do (Sh)ow Status but anywhere else you would have to type "SHS" for (Sh)ow (S)tatus. (feedback,fdbk,03340) i.e Change "Status" to a Command word in Sendmail and in the Ident subsystems.	1910
<pre>(2b1) =052= Have an option in Output Quickprint to put NO heading on any pages except for the string "Page #" at top=right on each page, (feedback,fdbk,03263) i.e. implement option and Change CML to be O[utput] Q[uickprint] (OK / N[o headers] (OK / REST) / REST); where REST = C[opies] / F[ile] / A[ppend] ;</pre>	1911
(2b1) =072= Expert=expert should not be the default recognition for new users, (feedback,fdbk,02714)	1912
(2b1) Change the CML to replace the entities "window" and "boundary" by the single entity "edge", i.e. S[plit window] H[orizontally] will become I[nsert] E[dge] etc.	1913
(2b1) change the SENDMAIL Command DONE to "SEND (the mail)"	1914
(2b1) change the SENDMAIL Commands SEND FOR ACTION and SEND for INFO to D[istribute] A[ction (copies to)] and D[istribute] I[nformation (copies to)]	1g15
Comments:	1h

)	DVN JMB KIRK 31=JUL=74 08:58 Schedule and Schedule Needs for Documentation of New NLS at Office=1	23704
	The short list under User's Glossary assumes we could write around certain issues.	1h1
	In the Difference Document we could also write around some issues to meat deatlines,	112
	Note the importance of freezing material for the Cuecard (to meet suggested September 7 delivery) and Primer (which can easilly get out by September 7th if its content is frozen by August 9th,	1h3
	Scheudle and Assignments:	2
	Week ending August 2	2a
	JMB Writing Cuecard, HELP	2a1
	DVN Editing Primer, User's Glosary, Setting up for printing	2a2
	drafts of User's Glossary, Primer to DDSI,	2a3
	KIRK Writing on Help, Programs for User's Glossary Production,	2a4
)	DEADLINES:	2a5
	COMMANDS SHOWN ON CUECARD MUST BE FROZEN AT THE END OF THIS WEEK TO MEET SEPT 7 DELIVERY,	2a5a
	Week ending August 9	2b
	JMB Finishing Cuecard, Reviewing Product of Syntax Generator,	261
	DVN Editing User's Glossary, rewiriting (22852) into Document on differences between Old and New TNLS,	262
	KIRK writing Changes into Help	263
	DEADLINES;	264
	CUECARD DRAFT TO PRINTER THIS FRIDAY TO MEET SEPT 7 DELIVERY	204a
	Clean Draft of Differences Document to DDSI	2646
	Clean Draft of Primer to DDSI	2b4c
	First run of command syntax generator	2b4d
	Week ending August 16th	2c

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JMB Editing and Reviewing Product of Syntax Generator,	201
DVN Editing User's Glossary, rewiriting (22852) into Document on differences between Old and New TNLS,	202
KIRK Writing Changes into Help	203
DEADLINES:	204
Clean draft of differnces document and FINAL draft of primer to DDSI,	2¢4a
First run of revised syntax generator	2¢4b
Week ending August 23rd	2d
JMB Editing and Reviewing Product of syntax Generator, Editing User's Glossary	2d1
DVN Editing User's Glossary, Checking and revising COM*d version of Differences Document,	2d2
CDM directives in Command Syntax	2d3
KIRK Writing Changes into Help, Final generation of User's Glossary from Help	2d4
DEADLINES:	2d5
FINAL DRAFT DIFFERENCES TO DDSI	2d5a
Model Draft of Command Syntax to DDSI	2d5b
Week ending August 30th	2e
JMB Editing and Reviewing Product of Syntax Generator, Editing User's Glossary	2e1
DVN Editing User's Glossary, Double check COM Directives,	2e2
KIRK Vacation	2e3
DEADLINES:	2e4
Clean draft User's Glossary and Command Syntax to DDSI	2e4a
JMB goes back to School	2e4b
Week ending Sept 7th	21

DVN JMB KIRK 31=JUL=74 08:58 23704

Schedule and Schedule Needs for Documentation of New NLS at Office=1

DVN Vacation (?)	2£1
KIRK Desperate Scramble to get out Glossary, Command Syntax	2£2
DEADLINES:	2£3
FINAL COMMAND SYNTAX, USER'S GLOSSARY TO DDSI	2£3a
comments:	29
In case of disaster all the documents except the Primer and the Cuecard could be printed on our line printer and reprinted	
later,	2g1
Drafts to DDSI should go Wednesday, not Friday,	2g2
Model Draft means something that looks like the final output we want but may be inaccurate in content.	293
A Clean Draft has content we will stand by; it is to check the printing operation. If the proofs were good we would print it.	2g4
Editing the User's Glossary normally consists of making change so that entries stand by themselves without the context of HELP. We believe these changes will in genral improve <documentation.help.> and plan to make them in the data base</documentation.help.>	
file,	295

DCE 31=JUL=74 09:38 23705

Re 23700, Dumps conflicting with work

(J23705) 31=JUL=74 09:38;;;; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /MEH([ACTION]) HGL([INFO=ONLY]) JCN([INFO=ONLY]) RWW([INFO=ONLY]) CHI([INFO=ONLY]) DVN([INFO=ONLY]) KIRK([INFO=ONLY]) JDH([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: DCE;

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Re 23700, Dumps conflicting with work

Regarding Harvey's note (GJOURNAL,23700,) on dumps being done during "prime" time == Martin is responsible for such operational matters, under Jim Norton, While Jim is gone, Martin is the one; I'll contribute if he needs me,



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Visit Log: 29 Jul 74, Fred Clayton, SRI, with NIOSH Project

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(J23706) 31=JUL=74 10:10;;;; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /JCN([ACTION]) BC([INFO=DNLY]) JHB([INFO=DNLY]) SRL([INFO=ONLY] Susan: you may run into these project people in our wash, office) NDM([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: DCE; DCE 31=JUL=74 10:10 23706 Visit Log: 29 Jul 74, Fred Clayton, SRI, with NIOSH Project

Dr. Fred Clayton has recently been hired into SRI expressely to work on the new NIOSH project, most of whose personnel will be based at SRI=DC. (For background on this project, see Journal items == 22651,> 22664,> 23466,> 23213,>. Fred's background includes:

A degree in veterinary medicine, one in public health, and also a degree in education.

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Most recently he was in the U.S. Public Health Service; the last position therein being at the National Library of Medicine. His responsibility there was chief of Toxicology Information Services Branch.

Rick Witwer asked if we could give Fred an introductory tour and demo during Fred's get-acquainted visit here at SRI=Menlo. It is possible that the SRI=NIOSH project could take up usage of our AKW Utility some time after it gets under way, and Clayton would be one of those to help evaluate.

I gave him a tour of the Center, and a basic intro/demo to DNLS, Journal, publication, XDOC, etc. We spent about 1 1/2 hours together. He had some typical documents showing the kind of things that their project will have to produce == material that supports policies and rulings laid down by the government authorities regulating working conditions as they affect occupational safety and health.

Fred began to list many places in the health-services world where it would seem that this type of system could be of benefit, but for lack of time I deferred further discussion along that line (Later, let's get some leads from him.)

He had with him several publications of the type that apparently the SRI=NIOSH Project will be publishing. We didn't have time for me to look at them carefully, but it would be worthwhile learning more about the NIOSH publication practices and needs.

I gave him one copy each of the following:

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D. C. Engelbart, AUGMENTING HUMAN INTELLECT: A CONCEPTUAL FRAMEWORK, SRI Project AFOSR=3223, October 1962 (XDOC -= 3906,)

D. C. Engelbart and W. K. English. "A Research Center for Augmenting Human Intellect", AFIPS Proceedings, Fall Joint Computer Conference, 1968, Washington, D.C. (XDOC == 3954.)

D. C. Engelbart, "Intellectual Implications of MULTI=ACCESS COMPUTER NETWORKS", A paper for the Proceedings of The Interdisciplinary Conference on Multi=Access Computer Networks in Austin, Texas, April 1970, (XDOC == 5255,)

DCE 31=JUL=74 10:10 23706 Visit Log: 29 Jul 74, Fred Clayton, SRI, with NIOSH Project

D. C. Engelbart, COORDINATED INFORMATION SERVICES for a DISCIPLINE= OR MISSION=ORIENTED COMMUNITY, paper presented at the Second Annual Computer Communications Conference, San Jose, California, 24 January 1973, (Journal, dated 12 Dec 72 == Mjournal, 12445,1: xhmz)

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D. C. Engelbart, R. W. Watson, J. C. Norton, THE AUGMENTED KNOWLEDGE WORKSHOP, paper presented at the National Computer Conference, New York City, June 1973. (IJOURNAL, 14724,)

Augmentation Research Center, "Output Processor Users" Guide," 23 Aug 73, (Journal == 12209,)



4.5 ····



FTPDRV Unresolved Symbols

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(J23707) 31=JUL=74 12:35;;;; Title: Author(s): James E. (Jim) White/JEW; Distribution: /GSG([ACTION]) ; Sub=Collections: SRI=ARC; Clerk: JEW;

JEW 31=JUL=74 12:35 23707

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FTPDRV Unresolved Symbols

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Geoff== The FTPDRV source, an NLs file, is self=contained, You should have no unresolved symbols. Specifically, what problems are you experiencing, i.e. what symbols can't be resolved? ==Jim

FTPDRV Problem/Patch

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(J23708) 31=JUL=74 19:31;;;; Title: Author(s): Geoffrey S. Goodfellow/GSG; Distribution: /JEW([INFD=ONLY]); Sub=Collections: NIC; Clerk: GSG; FTPDRV Problem/Patch

The problem with FTPDRV at present, is that it always fails on the first try, and leaves a "Not Logged In" lying around, that can only be flushed by going into MDDT and doing magic with the network code. I figure that if I make it sleep for 30 secs. or so, before doing anything, that this problem will hopefully go away. My problem before was that I was trying to compile the in macro, when actually it is written in Fail. Another thing...in the source that is in <NET> (brought back by archive), you have ARCG typed in right after the thing logges in, and in the .log file in system, it has ;RCG entered, and wondered if this was an earler version of it, and or maybe it was a typing error. I have put the sleep code, in and left the stuff in net, if you'd like to take a peek. ==Geoff



3 4

arrived

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(J23709) 31=JUL=74 19:41;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /NDM([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: RLL;

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arrived

Dean: Well I am here with the gang (both family and ARCers). In a frantic last minute selling I sold the Volvo for 2200, much less than I hoped or should have sold it for bt could not do better . Sold it at 8:45 PM the nigt before flying out of MaryInd. Roofers came, painters finished (thanksto your recommendation. it looks lpretty good) and the movers arrive thursday. Wow what a week!!!. What is up on your demo??? et me know I will be checking in ever so often the rest of the week. Rob





JEW 1=AUG=74 08:22 23711

FTPDRV Ident

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(J23711) 1=AUG=74 08:22;;;; Title: Author(s): James E. (Jim) White/JEW; Distribution: /GSG([INFO=ONLY]) ; Sub=Collections: SRI=ARC; Clerk: JEW;

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FTPDRV Ident

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Geoff== As you noticed, <NET>FTPDRV,NLS does send ident=ARCG, and has never done otherwise, as far as I can recall, ";RCG", unless you saw i consistently in the log, sounds like a printer glitch. Sorry about the MACRO/FAIL confusion. Glad you got your mod in OK, ==Jim Party For Ferg at Rod's Place

(J23712) 1=AUG=74 15:05;;;; Title: Author(s): Jeffrey C. Peters/JCP; Distribution: /SRI=ARC([ACTION]) ; Sub=Collections: SRI=ARC; Clerk; JCP;

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Party For Ferg at Rod's Place

Friday after work at Rod's house, there will be a going away party for Ferg and Dalin. All are invited, and you should bring whatever food, drink, or etc, that you are inspired to bring. The address in 535 Encina. From SRI go north on Middlefield past Marsh Road. In a few blocks you will reach Encina. Turn right and go almost to the end where you will see a red mailbox on the left side of the road == That's the place!! Hoping to see everybody there ===

Latest Liaison Mailing List



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(J23728) 3=AUG=74 16:55;;;; Title: Author(s): Elizabeth J. (Jake) Feinler/JAKE; Distribution: /SRI=ARC([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: JAKE; Origin: <FEINLER>LIAISON.NLS;1, 3=AUG=74 16:34 JAKE ;;;;<FEINLER>LIAISON=3.NLS;1, 29=JUL=74 16:07 JAKE ;####;

Latest Liaison Mailing List

This is the latest list I have available for contacting Network Liaison, There will be two files maintained in <NETINFO> at OFFICE=1 called: LIAISON,TXT and LIAISON=SNDMSG,TXT, These will contain the latest information = one with full addresses and the other (LIAISON=SNDMSG) suitable for sndmsg distribution, Feel free to ftp them at any time, If you do not have a directory at OFFICE=1 you may use NICGUEST for ftp purposes ONLY.

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Latest Liaison Mailing List

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NETWORK LIAISON GROUP MEMBERSHIP LIST

ENTRIES ARE IN THE FOLLOWING FORMAT:

Name	NIC Ident	Network Mail	Address
U.S. Mail Address		Phone(s)	
City, State, Zip		Organization	Ident(s)

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JHB BAIR@SRI=ARC (415) 326=6200 ext 3614 SRI=ARC

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BINDER, Richard RB BINDER@ISI University of Hawaii (808) 948=7066 The ALOHA System HAWAII=ALOHA 2540 Dole Street Honolulu, Hawaii 96822

BLANC, Robert P. RPB BLANC@BBN National Bureau of Standards (301) 921=2601 Institute for Computer NBS=ICST Sciences and Technology Washington, D.C. 20234

Latest Liaison Mailing List

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TLB2 BOYNTON@USC=ISI (213) 822=1511 ext 188 ISI=SPEECH11

BRADEN, Robert T. RTB BRADENOUCLA=CCN University of California at Los (213) 825=7518 Angeles UCLASCON Campus Computing Network 5308 Math Sciences Building Los Angeles, California 90024



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> Network Address Not Known (513) 255=6247 WPAFB

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JAKE 3=AUG=74 16:55 23728

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JAKE 3=AUG=74 16:55 23728

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(904) 882=5498

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MBY YOUNGQUSC=ISI (305) 494=2966 RML=TIP

ZATKALIK, Barry L. Air Force Global Weather Central (DN) DOCC NCOIC System 1 Offutt AFB, Nebraska 68113 BLZ Network Address Not Known (402) 294=4934 GWC=TIP

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Bug in LEVEL=ADJUST



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(J23729) 3=AUG=74 23:10;;;; Title: Author(s): Kirk E. Kelley/KIRK; Distribution: /BUGS([ACTION]); Sub=Collections: SRI=ARC BUGS; Clerk: KIRK;

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Bug in LEVEL=ADJUST



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In the Insert Statement command (and I presume whereever L: appears, typing "d<"A>u" looks good but does not place the statement up a level, but inserts it at the same level.

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(J23730) 4=AUG=74 04:29;;;; Title: (Expedite) Author(s): Geoffrey S. Goodfellow/GSG; Keywords: ; Sub=Collections: NIC; RFC# ; Clerk: GSG; <MJOURNAL>23730.NLS;1, 5=AUG=74 05:32 XXX ;;;; (Expedite)
Author(s): Geoffrey S. Goodfellow/GSG; Keywords: ; Sub=Collections:
NIC; RFC# ; Clerk: GSG;

Message subsystem bug



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Message subsystem bug



a - 2

Dean, your message subsystem is giving me the "file not on line " business again, Le me know when it is ready, Thanks, "OPERATOR" MESSAGES

5 - e

(J23732) 5=AUG=74 12:18;;;; Title: Author(s): Jeffrey C. Peters/JCP; Distribution: /SRI=ARC([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: JCP;

"OPERATOR" MESSAGES

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We have re=established the <operator> directory at SRI=ARC. It now exists expressly as a mailbox to receive user requests and problem reports. Anything sent to <operator> will reach Jeff, Mark, and Marcia and will be handled by whoever is appropriate. You may, as usual, direct these messages to one or all of us instead, but at least the <operator> mailbox is now available for message sending. Lineprocessor, SRI purchase,

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(J23733) 5=AUG=74 13:13;;;; Title: Author(s): Martin E, Hardy/MEH; Distribution: /TLH([INFO=ONLY]) JCN([INFO=ONLY]) DCE([INFO=ONLY]) RWW([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: MEH; Origin: < HARDY, SRI=LP, NLS;10, >, 5=AUG=74 08:28 MEH ;;;;####; Lineprocessor, SRI purchase,



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SRI

MEMO

TO: Bob Wing

FROM: Martin Hardy

DATE: 2 AUG 74

LOCATION: J=2072

SUBJECT: SRI Capital Purchase of one Lineprocessor, Mouse, and Keyset,

CC: ryw tlh dce jcn rww

In anticipation of projected needs the Augmentation Research Institute (ARC) has received approval to purchase several Lineprocessors, Mice, and Keysets on SRI account 12120 work order 316.

This memo is a request to allocate \$2,500 of SRI capital equipment funds to purchase one Lineprocessor, Mouse, and Keyset purchased on the 12120 work order 316 account. This equipment will be installed at SRI for use by Tom Humphrey who is the SRI architect associated with the ARC Office=1 computer facility. Lineprocessor, SRI purchase.

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(J23734) 5=AUG=74 13:13;;;; Title: Author(s): Martin E, Hardy/MEH; Distribution: /TLH([INFO=ONLY]) JCN([INFO=ONLY]) DCE([INFO=ONLY]) RWW([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: MEH; Origin: < HARDY, SRI=LP,NLS;10, >, 5=AUG=74 08:28 MEH ;;;;####; Lineprocessor, SRI purchase,



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SRI

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MEMO

TO: Bob Wing

FROM: Martin Hardy

DATE: 2 AUG 74

LOCATION: J=2072

SUBJECT: SRI Capital Purchase of one Lineprocessor, Mouse, and Keyset.

CC: ryw tlh dce jcn rww

In anticipation of projected needs the Augmentation Research Institute (ARC) has received approval to purchase several Lineprocessors, Mice, and Keysets on SRI account 12120 work order 316.

This memo is a request to allocate \$2,500 of SRI capital equipment funds to purchase one Lineprocessor, Mouse, and Keyset purchased on the 12120 work order 316 account. This equipment will be installed at SRI for use by Tom Humphrey who is the SRI architect associated with the ARC Office=1 computer facility. title is what when I start typing

× .

(J23735) 5=AUG=74 14:39;;;; Title: (Unrecorded) Title: Author(s): Kirk E. Kelley/KIRK; Distribution: /KIRK([ACTION]) ; Sub=Collections: SRI=ARC; Clerk: KIRK;

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title is what when I start typing

test message

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New method of updating origin statements

(J23736) 6=AUG=74 00:14;;;; Title: Author(s): Kirk E. Kelley/KIRK; Distribution: /CHI([INFD=ONLY]) KEV([INFO=ONLY]) ; Sub=Collections: SRI=ARC; Clerk: KIRK;

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New method of updating origin statements

The following is the method for updating information in an origin statement I wish to implement. It is upwardly compatable with the current method and current files.

Currently there is a right delimiter ";;;;" and everything to the left of that delimiter is deleted and replaced by the new < USERNAME, FILENAME,EXT;12, > DATE TIME IDENT This procedure would not change.

The new method would only operate on an optional left delimiter added by the user ";>". If this left delimiter is found, then only text between the left and right delimiters will be replaced by the new information. The left delimiter will be maintained,

If the left delimiter is not found, it will work as it does now. The left delimiter will not be added,

If the right delimiter is not found and the origin statement is unnamed, it will work as it does now. That is, a right delimiter will be created and the information inserted at the beginning of the statement. The left delimiter will not be added,

If the right delimiter is not found and the origin statement is named, it is assumed the user deleted the origin information on purpose and the origin statement will therefore not be modifed.

If there is no right delimiter, there is no purpose in finding a left delimiter.

The two characters in the left delimiter ":>" are chosen for four reasons. First of all, they would rarely (if ever) unintentionally occur together before four semicolons. Secondly, if the user wished only to name the Origin statement and have the other origin information immediately follow, the colon in the right delimiter preceeded by one word would do that for him automatically (default name delimiters are to be NULL colon, right?). Third, if a viewing system (guery/help) wishes to use the first link in an addressed statement to define the view from that point, the above left delimiter would keep such a system from getting in a loop when encountering a named origin statement. Four, it does not look too bad.

NAME:> < USERNAME, FILENAME, EXT:12, > DATE TIME IDENT ;;;;

Response to questions about Training

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(J23737) 6=AUG=74 08:38;;;; Title: Author(s): James H. Bair/JHB; Distribution: /JCN([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: JHB;

1

Response to questions about Training



 Previous exposure to NLS is OK with two considerations: That I know what people have covered (their capability), and that this exposure be consistent for all individuals in the course (as much as possible).

2) From experience we know that it is very important that each person in the class have a terminal available in the conference room. This also provides the basis for a more interesting, experiential learning situation. Thats it for a good start. Sincerely, Jim Bair Short Bibliography on COBOL Aids

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(J23738) 6=AUG=74 14:46;;;; Title: Author(s): Harvey G. Lehtman/HGL; Distribution: /RWW([ACTION]) JML([ACTION] Please find or order the noted items while I'm away.); Sub=Collections: SRI=ARC; Clerk: HGL; Origin: < LEHTMAN, COBOL.NLS;2, >, 6=AUG=74 14:43 HGL ;;;;;####;

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Short Bibliography on COBOL Aids

The following references may be useful in our evaluation of existing COBOL programmers interfaces. Those marked with an asterisk are available neither through the SRI or Stanford libraries and sound promising enough to try to find.

Computer World	10
"Must COBOL be ineffeicient?" Computer World 7:11 20 June 74	1a1
"COBOL Clinic" Computer World 7:16 21 Nov 74	1a2
"COBOL Clinic" Computer World 8:16 6 Feb 74	1a3
"COBOL Clinic counterpoints" Computer World 8:80 27 Feb 74	1a4
"COBOL Clinic counterpoints" Computer World 8:16 6 Mar 74	1a5
"Structured programming does work in COBOL" Computer World 8:10 27 Mar 74	1a6
Data Management (at Stanford Library)	1b
Sider. "The right way to implement a COBOL Program" Data Management 11:22=3 Oct 73	161
sider, "The wrong way to implement a COBOL Program" Data Management 11:37=9 Aug 73	162
Computer Decisions	10
Goetz, "Soup up your programers with COBOLaids" Computer Decisions 5:8=12 Mar 73	101
* EDP Analyzer (Also referred to in Goetz.)	1 d
"COBOL Aid Packages" EDP Analyzer 10:1=14 May 72	1d1
"Modular COBOL programming" EDP Analyzer 10:1=14 July 72	1d2
"On-line Development of COBOL Programs" EDP Analyzer 10:1=15 June 72	1d3
Please find copies of these articles at some library or else through the publisher:	1d4
EDP Analyzer	1d4a
925 Anza Ave.	1d4b

Short Bibliography on COBOL Aids

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Vista, CA 92083	1d4c
* Book (Originally appeared in Data Processing Digest which is in neither library, Recommended also by Goetz.)	1e
Naftaly, et al. COBOL Support Packages, J. Wiley, publisher.	1 e 1

My Plants Will Need You

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(J23739) 6=AUG=74 14:54;;;; Title: Author(s): Harvey G. Lehtman/HGL; Distribution: /EKM([ACTION]); Sub=Collections: SRI=ARC; Clerk: HGL;

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My Plants Will Need You

- - 10

Please take care of my plants (in both my office and in Susan Lee's office.) They get water on Monday, Wednesday and Friday if they need it. My address in Maui will be: Hale Maui Apartment Hotel, P.O. Box 516, Lahiana, Maui, Hawaii 96761. The phone is (808) 669=6312. Will return either 22 August or 26 August. Think positively about the talks. Thanks.
RLL 6=AUG=74 20:06 23740

sug on copy file command

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(J23740) 6=AUG=74 20:06;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /FDBK([ACTION]) ; Sub=Collections: SRI=ARC; Clerk: RLL;

sug on copy file command

When copyin file (copy file command) and one gives a new file name the statement zero in the new file is acopy of statement of the old file. Thus, the old file name and directory appears, this, of course, disappears when one does an update. The suggestion: perhaps it wuld be better to replace file name in staement zero with the new file immediately. One is not immediately sure which file you really have up.



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RWW 7=AUG=74 08:44 23741

Meeting of development on Aug 16

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(J23741) 7=AUG=74 08:44;;;; Title: Author(s): Richard W. Watson/RWW; Distribution: /NPG([ACTION]) DVN([ACTION]) KIRK([ACTION]) JMB([ACTION]) ; Sub=Collections: SRI=ARC NPG; Clerk: RWW;

Meeting of development on Aug 16

st - - +

I would like to have a meeting to review what happened at the Alabama meeting and to see where we are relative to all the NSW tasks on Friday August 16 at 2:00. Dick

NSW Fiche Problems: Reply to 23742

(J23743) 7=AUG=74 11:08;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /NDM([ACTION]) EKM([INFO=ONLY]) RWW([INFO=ONLY]) DCE([INFO=ONLY]) JCN([INFO=ONLY]) ; Sub=Collections: SRI=ARC; Clerk: DVN;

DVN 7=AUG=74 11:08 23743

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NSW Fiche Problems: Reply to 23742

Well, that's too bad.

Now that we atleast have a figure to compare with, I will go back to DDSI and atleast talk about whether they can offer a competitive price. Would stick fonts satisfy Carlson?

I would like one of us rejournalize your note to get it into the DPCS subcollection wth some more retrievable title, like say "NSW Fiche format needs", OK?



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(J23744) 7=AUG=74 14:42;;;; Title: Author(s): Richard W, Watson/RWW; Distribution: /FDBK([ACTION]); Sub=Collections: SRI=ARC; Clerk: RWW;

bugs

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Two bugs. In the calculator the accumulator value no longer shows up in theright hand corner and should, Second, jump file return has a bug as when you try to move around the ring to go back by hitting space bar after about three hits it just goes and theen gies an error message. acoustic couplings

(J23745) 7=AUG=74 16:08;;;; Title: Author(s): Sandy L. Johnson/SLJ; Distribution: /SRI=ARC([ACTION]); Sub=Collections: SRI=ARC; Clerk: SLJ;

SLJ 7=AUG=74 16:08 23745

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acoustic couplings

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if you have a brown super-simulated anderson-jacobson acoustic coupler at home, please bring it it immediately and exchange it for on of the novations i have in supply closet,,,,we have to return the two anderson jacobsons, thank you, miranda, DRAFT: Submarine Detection

. . .

(J23746) 8=AUG=74 08:36;;;; Title: Author(s): N. Dean Meyer/NDM; Distribution: /DCR2([INFO=DNLY]); Sub=Collections: SRI=ARC; Clerk: NDM; Origin: < MEYER, 43450,NLS;1, >, 8=AUG=74 08:34 NDM ;;;;####;

NDM 8=AUG=74 08:36 23746

DRAFT: Submarine Detection

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			-							1.2	

I. This is the first part to demonstrate use of a	rt of a simple report used distributed file system. The	
among various computers	connected to the ARPANET,	1a
II. The demonstration will of the three parts of the is the second part) and is the final report. The ver- together in a site indep	ll involve collection e report (of which this merger of them together to form arious parts will be gathered endent manner.	15
III, The complete destination using the net complete the demonstration	d report will then be transmitted to its twork mail service. To on the report will be	
received and read at the	destination,	10
ternatives		2
System A		2a
Description		2a1
This system is base radar scanning dev:	ed on strategic placement of under-water ices	2a1a
Costs		2a2
Planning	\$48,750,000	2a2a
Surveying	3,500,000	2a2b
Radar scanners	23,500,000	2a2c
Central facility	149,000,000	2a2d
Computers	850,000,000	2a2e
scheduling		2a3
Planning	12 months	2a3a
Construction	48	2a3b
Debugging	9	2a3c

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NDM 8=AUG=74 08:36 23746

DRAFT: Submarine Detection

	SCHEDULE				
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P	lanning :	-			
Ç	onstruction:	is survey as a			
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9	epugging i				
=					
F	iscal year '76 80	*77	*78	*79	
=				***************	2a4
Syst	em B				20
D	escription				261
	This system is bas	ed on a new	submarine de	tecting device	
	which should minim.	ize the chan	ce of errors	and so make	
	analysis much easi	er			2b1a
c	osts				262
	planning	\$78,000,0	00		2b2a
	Surveying	3,500,0	00		2020
	New Detectors	223,500,0	00		2b2c
	Central facility	149,000,0	00		2b2d
	Computers	475,000,0	00		2b2e
S	cheduling				263
	Planning	20 month	5		2b3a
	Construction	40			2030
	Debugging	7			2b3c
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-				**************	
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P	lanning :======		· · · · · · · · · · · · · · · · · · ·		

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DRAFT: Submarine Detection

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Construction:

Debugging :

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Fiscal year *76 *77 *78 *79
*80

====== 2254
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Recommendation

Given the extreme importance of this project in maintaining our defensive security, we feel that ...



* ** *



JHB 8=AUG=74 11:32 23747

Secondary distribution of Net Liasison Mailing List

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(J23747) 8=AUG=74 11:32;;;; Title: Author(s): James H. Bair/JHB; Distribution: /DCE([ACTION]); Sub=Collections: SRI=ARC; Clerk: JHB;

JHB 8=AUG=74 11:32 23747

Secondary distribution of Net Liasison Mailing List

Is this everything you needed?



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JHB 8=AUG=74 11:32 23747

1a

Secondary distribution of Net Liasison Mailing List

JAKE 3=AUG=74 16:55 23728 Latest Liaison Mailing List

4 - - - -

Location: (GJOURNAL, 23728, 1:w) *****Note: [INFO=ONLY] *****

Comments: This is the latest list I have available for contacting Network Liaison. There will be two files maintained in <NETINFO> at OFFICE=1 called: LIAISON.TXT and LIAISON=SNDMSG.TXT. These will contain the latest information = one with full addresses and the other (LIAISON=SNDMSG) suitable for sndmsg distribution. Feel free to ftp them at any time. If you do not have a directory at OFFICE=1 you may use NICGUEST for ftp purposes ONLY.

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(J23748) 8=AUG=74 13:53;;;; Title: Author(s): Kenneth E. (Ken) Victor/KEV; Distribution: /RJC([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: KEV;

i received your message re: update tade directory

15 9

JHB 9=AUG=74 08:25 23749 Visit log, 1 = 2 Aug 74, Dan Garigan, Consultant to the Oregon State Legislature

(J23749) 9=AUG=74 08:25;;;; Title: Author(s): James H. Bair/JHB; Distribution: /PROF([INFO=ONLY]); Sub=Collections: SRI=ARC PROF; Clerk: JHB; Origin: < BAIR, VISITLOG.NLS;4, >, 9=AUG=74 08:14 JHB;;;;####;

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JHB 9=AUG=74 08:25 Visit log, 1 = 2 Aug 74, Dan Garigan, Consultant to the Oregon State	23749
Legislature	
Visit log, 1 = 2 Aug 74, Dan Garigan, Consultant to the Oregon State Legislature in Legislative Information Sysytems,	1
His company = Sysytem Technology Co. 6830 River Rd.	
Salem, Ore,	1a
Background;	1b
UCLA: Engineer in system simulation and cybernetics, active in the development of the Sigma 7;	161
Univ, of Missouri; Developed state wide teleporocessing network on 371=55, Director of facility;	162
U of Chicago: academic background (no PhD);	163
Present: As consultant and independent bidder, did the Data base design for a health information system; Consultant in the planning of a Legislative Management info system; Worked on \$250K grant for a state judical system, "Judicial Statutes Project"	154
Present (and reason for visit):	10
Oregon Legislative Information System (OLIS)	101
700k for system development plan:	1¢1a
Bill drafting (Currently, use 3 terminals for IBM's ATMS == temporary?)	10141
Legislative measure status	1c1a2
Text retrieval	1c1a3
2 RFPs sent out by Technology Committee Staff (?);	1016
1) Text Retrieval System	1c1b1
Dan was an evaluator, posibilities were STAIRS, Battelle's BASIS 70, Boeing, and IBM	icibia
2) Automated Textual Data Bases ==Preliminary System Design	10162
Data base eg, = court decisions, Dan and the Computer	

JHB 9=AUG=74 08:25 23749 Visit log, 1 = 2 Aug 74, Dan Garigan, Consultant to the Oregon State Legislature

Science Corp. lost bid, primarilay becuase they did not include a cost=benefit analysis ("not appropriate"). The Oregon Research Institute also 1c1b2a bid. statutes are already being converted into computer 1c1b2b readable form. 1d Organization of Legislature related to project: printing Task Force Administrative Comm. Technology Comm. 1d1 1d1a Coordinator = Bill Stow 1d1a1 System Development Staff 1d1a1a Claudel & Miles (programmers) 1d1b User Rep. = Steve Korsak 1d1b1 House Staff Senate



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History of Project:

Oregon has not sent out RFPs to acquire such software systems before. Charles received the two that are mentioned. IBM has a strong foothold in the state and has been bidding on the RFPs as well as supporting some of their present DP work. They are trying to sell ATMS on a larger scale among other things. HOWEVER, somehow, particularly among the technical staff, a dissatisfaction has developed, and, the way Dan relates it, the original proposals have not been accepted and the whole plan for the next two years is up in the air. This is what prompted him to contact us.

Events during visit:

Met with JHB == received demo and hands on experience throughout the day, for a few hours on Fri, as well. We then went to lunch with DCE, CHI, HGL, and JHB. The major portion of the afternoon was spent with DCE establishing the background and philosophy of AKW, the community concept, and the current expansion to include other organizations in the bootstrapping process via a community of architects.

The logistics of subscribing to the Utility were described, noting that the service is experimental. It was suggested that 1£1

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JHB 9=AUG=74 08:25 23749 Visit log, 1 = 2 Aug 74, Dan Garigan, Consultant to the Oregon State Legislature

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Dan consider the architect role and obtaining support for a developmental subscription.

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Follow=on Plans:

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Dan was pumped up with as much hands on experience, lore, and tactical info as possible so that he could go back and represent NLS and our strategies to those people who could respond. He will talk in particular to Bill Stow about possible involvement. Dan does want us to come to Salem to make a presentation, although we emphasized that we do not make any sales pitches. We will keep in touch.

RLL 9=AUG=74 10:43 23750

A new jump command suggestion,

North State

(J23750) 9=AUG=74 10:43;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /FDBK([ACTION]) JHB([ACTION]); Sub=Collections: SRI=ARC; Clerk: RLL; A new jump command suggestion.

I have often found that I wanted a window view showing the last (tail) part of the plex. Jump to tail shows only the tail statement and what follows. I suggest we have another jump (e.g. jump to full tail) that would have the tail statement as the last line of the window, this would give a full screen view of the last part of the plex. Of course it would obey viewspecs. A more general set of jump commands would be a tjump, Where tjump noun does the same as jump noun but positions the bugged (or addressed) statement at the tail(end, bottom) of the window, Rob

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New NLS Bug in Return Ring

(J23751) 9=AUG=74 11:03;;;; Title: Author(s): James H. Bair/JHB; Distribution: /FDBK([ACTION]) CHI([ACTION]) RWW([INFO=ONLY]) JCN([INFO=ONLY]); Sub=Collections: SRI=ARC; Clerk: JHB; New NLS Bug in Return Ring

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This is an example of the kind of thing that should be fixed before applications accepts the New version of NLS.

JHB 9=AUG=74 11:03 23751

New NLS Bug in Return Ring

New NLS Bug:

This is an attempt to accurately document a recurring problem with the hope that something will be done, and to help as much as I can before bitching about bugs that don't seem to get fixed.

Situation: 2 hrs of online work with 10 files listed in the file return ring, Using the Jump to File Return command and spacing back through the ring to my initials file,

Error msg: "file numbers do not match in storesrring". Repeated the command and spacing with same error msg. Then attempted Jump to Link typing in the filename == received same error msg. Load File also produced the same error msg. Help from programmers was not available due to higher priorites. Since I was in a file that I did not have write access to, the only alternative was to reset NLS. A check of my initials file indicated that the Journal was not writing on it at the time I tried to return to it. Of course there was a partial copy.

Recurrance: This kind of problem has occurred numerous times in recent weeks. This is the first time I have been able to document it completely. It occurred in 3 demos with different error msgs and occurred with Jump to Return as well (the previous window was simply not there).

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