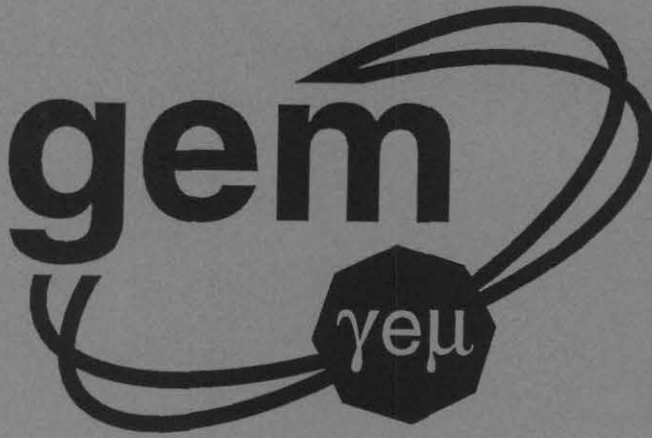




Local GEM Computing Meeting

June 1, 1993

Abstract;

Attendees, agenda and presentation of the Local GEM Computing Meeting held on June 1, 1993

LOCAL GEM COMPUTING MTG. 1/JUN/93

<u>NAME</u>	<u>MS</u>
I. SHEER	2000
H. Uijterwaal	2005
J. Hilgart	2003
Naser Danesh	2003
Lee Roberts	2003
Jin Chu Wu	2003
Gary Word	2005
KRIS SCHLUEDERMANN	2005

From: Michael Stegawski
To: Local GEM computing meeting
Subj: Common home directory path for DAQ and SDC
Date: 6/1/93

Objective:

The goal for the proposed action is to implement a consistent directory structure for all involved groups.

Reason:

The rationale behind proposed directory path change is to resolve inconsistency and complexity of the present structure and insure maximum stability across user groups and hardware platforms. The new structure should make it simple for the end user to locate files in the distributed computing environment and lessen network dependency. An additional benefit will be a choice of using one or both of the two default directories for each user:

- 1) local directory on a workstation
- 2) remote directory on a server

Future recommendations:

Implementation of this proposal should be followed by an introduction of a network file system management software.

Outline:

Each user has a local directory is on his/her workstation.

Examples:

/home/snail/daq/botlo
/home/bangkok/sdc/fry

Each user has also a directory on a server.

Examples:

/home/slug/daq/botlo
/home/luke/sdc/fry

Each user is given a choice of working in the local directory on his/her node or changing the current working directory to the server's one. The advantage of working in the server's directory is that files in this directory are backed up daily. The disadvantage is that data access is across the network and depends on network performance.

Only server directories are backed up by default. Requests for backing up local directories on particular nodes would be evaluated based on merit and benefit to the group.

Technical evaluation:

- The known overhead imposed by the proposed setup is a requirement for an additional NFS automounter controlled mount in order to resolve the actual location of user's archive directory. This situation occurs only while remotely referencing files on a server equipped with multiple disk drives.

Example:

User 'fry' trying to access his files on server 'luke'.

A reference to a file in the /home/luke/sdc/fry/afire directory causes a mount of the luke:/usr/export/home directory on /home/luke. The symbolic link /home/luke/sdc/fry pointing to /ndrv/luke_01/fry triggers a second mount luke:/usr/export/luke_01 on /ndrv/luke_01. The first mount takes place only when referencing files on a server using an absolute path and expires when not used during the predetermined amount of time.

- The major advantage of this setup is a great simplicity of the structure and an ability to move user's files from one drive to another without affecting the path to his/her data nor other users.

Automounter setup:

```
auto.master
/home      auto.home
/ndrv      auto.ndrv
/-         /etc/auto.direct
/net       -hosts

auto.home
*          &:/usr/export/home

auto.ndrv
slug_01 slug:/usr/export/slug_01
...
luke_01 luke_01:/usr/export/luke_01
...
/etc/auto.direct
/usr/ssc serv1.ssc.gov,serv2.ssc.gov:/afs/ssc.gov/@sys
+auto.direct
```

Following example is based on user 'fry' from SDC using server 'luke':

Home directory: /home/bangkok/sdc/fry
Server directory: /home/luke/sdc/fry

On node 'bangkok'

/usr/export/home/sdc/fry - seen as /home/bangkok/sdc/fry

On server 'luke'

/usr/export/home/sdc/fry - a symbolic link to /ndrv/luke_01/fry
Drive luke_01 mounted on luke:/usr/export/luke_01

If we decided to introduce a node seen as a whole system instead of server, then:

On node 'sdc'

/usr/export/sdc/sdc/fry - symbolic link to
/home/bangkok/sdc/fry
and "fry's" login directory: /home/sdc/sdc/fry

Implementation:

Proposed implementation time frame is the second week of June.

Compatibility with existed systems:

Above setup provides for an easy mechanism of providing access to existing directory structures on other systems. It achieves it through a structure of symbolic links to users' directories.

As an example lets evaluate the directory structure on the 'sscuxl' server. User's 'steg' home directory is /home/sscuxl/sys/steg. The actual mount for the drive containing user's file is /home3/sscuxl.

In order to resolve the location of user's files, a structure of symbolic links for each user is created on the server 'sscuxl'.

/usr/export/home/sys/steg -> /ndrv/sscuxl_03/sys

The auto.ndrv NIS map defines the sscuxl_03 drive as:

sscuxl_03 sscuxl:/home3/sscuxl

WWW at SSCL

- World Wide Web is a client/server information service based on a very simple protocol: HTTP
- Xmosaic is a good X-based browser (client), but the line-mode client www should even work in remote areas
- A www server for the lab began operations last week
- www interfaces with existing protocols w/ no effort:

USENET news

gopher - a very popular protocol

ftp - i.e., anonymous ftp

WAIS - Wide Area Information Service

http - www protocol. HTTP2 is an RFC file - to view your own files

- Hypertext (links to other documents) built into HTTP
- Hypermedia (bit-map images, sounds, movies) possible

Document Title: SSC World Wide Web Information

Document URL: http://www.ssc.gov/SSC.html



SSC World Wide Web Information

The SSC WorldWideWeb (WWW) service provides access to a wide range of information from a variety of sources both at SSC and elsewhere. Information is provided in the form of hypertext which allows users to follow pointers from one item to other related items, and thus to access the information they need in a simple intuitive manner. Information is accessed using the TCP/IP network and can actually reside anywhere in the world, although the user does not need to know where the information comes from.

This service is in a beta version, and your comments are welcome by the developers. We have unabashedly borrowed from SLAC for much of this material.

SSC information

GEM.SDC

Information specific to SSC experiments.

SSC library

The SSC library's collection. (Send username "follo".)

People.

The SSC electronic phonebook.

SSC newsgroups

Newsgroups of interest to SSC.

SSC GOPHER server

Gateway to an experimental gopher server at the SSC.

Controls section of SSC

Miscellaneous projects at the SSCL.

Other Information

See also HEP information(CERN, DESY, HEP publications, etc.), academic information, APS News.

Search Keyword:

Back Forward Home Reload Open... Save As... Clone New Window Close Window

Document Title: GEM Information

Document URL: http://www.ssc.gov/gemwww/gem.html



GEM Information

http protocol

The following information is provided for GEM collaborators.

GEM technical notes.

A data base of GEM technical notes. Not yet available.

GEM news groups

News articles relevant to GEM, i.e., posted by GEM collaborators.

GEM tree

A hypertext browser of the GEM software directory.

Help

GEM news

Here are some suggestions if you are having trouble reading or posting to any of those great GEM newsgroups you've heard about.

Search Keyword: _____

Back Forward Home Reload Open... Save As... Clone New Window Close Window

Document Title: gem directory

Document URL: <http://www.ssc.gov/gemwww/gem>



gem

- [Up to gemwww](#)
- [etc/](#)
- [RCS/](#)
- [bin/](#)
- [contrib/](#)
- [cvs/](#)
- [demo/](#)
- [doc/](#)
- [include/](#)
- [info/](#)
- [ins/](#)
- [lib/](#)
- [man/](#)
- [src/](#)
- [physics/](#)
- [gemadm/](#)

but access to CERN is blocked!



Search Keyword:

Document Title: GEM newsgroups

Document URL: http://www.ssc.gov/GEM_newsgroups.html



GEM newsgroups

The following newsgroups are specific to GEM:

[ssc.gem.calor](#)
[ssc.gem.comp](#)
[ssc.gem.local](#)
[ssc.gem.news](#)
[ssc.gem.tracker](#)

This list was generated by [JohnH](#) from [sunova.ssc.gov](#) on Fri May 21 17:30:02 CDT 1993

Search Keyword:

Back Forward Home Reload Open... Save As... Clone New Window Close Window

Document Title: USENET newsgroup ssc.gem.comp

Document URL: news:ssc.gem.comp



All available articles in ssc.gem.comp **news protocol**

- "Meeting reminder." - Gary Brian Word
- "SA/SD experience in D0" - Don't you want it now?
- "gemfast v11203" - TOMASZ@SSCVX1
- "Version v1.03 of libtrf released." - Henk Uijterwaal
- "GEM tree has moved on SUNs" - hilgart@SSCUX1
- "12 MAR 93 minutes, GEM Ph. Comp. Grp." - Gary Brian Word
- "Ultrix tree changed" - hilgart@SSCUX1
- "local gem computing meeting" - Irwin Sheer
- "April 2 GemComp mtg" - Gary Brian Word
- "gemfast v11204" - Tomasz Skwarnicki
- "C++ coding rules" - Irwin Sheer
- "gemfast v11204" - TOMASZ@SSCVX1
- "gemfast v11204 on all platforms" - "Tomasz Skwarnicki"
- "DDT" - John Womersley, SSCL-D0
- "/gem tree on HP and IBM" - hilgart@SSCUX1
- "PDSF SGI's now use AFS" - hilgart@SSCUX1
- "Passing initialization data to applications" - Irwin Sheer
- "Re: Passing initialization data to applications" - Irwin Sheer
- "Use of WWW for information transfer in CMS experiment at CERN" - "John Womersley, SSCL-D0"
- "May 7 GemComp mtg" - Gary Brian Word
- "Libtrf v1.04 Released." - Henk Uijterwaal
- "CERN v93b is on GEM tree" - hilgart@SSCUX1
- "PDSF processors being limited to batch use" - Ken McFarlane
- "Development of a full simulation package for 1994-1995" - "John Womersley, SSCL-D0"
- "Minutes of comp. steering committee, May 7th" - hilgart@SSCUX1
- "process initialization" - Irwin Sheer
- "Acting Steering Committee" - Gary Brian Word
- "Next Acting CSSC mtg, June 24?" - Gary Brian Word



Search Keyword:

Document Title: USENET article 1993May25.135709.8201@sunova.ssc.gov

Document URL: news:1993May25.135709.8201@sunova.ssc.gov



word@pdsf.ssc.gov (Gary Brian Word)

Next Acting CSSC mtg, June 24?

Superconducting Super Collider Laboratory Tue, 25 May 1993 13:57:09 GMT

Newsgroups: ssc.gem.comp

After several days of effort, Charlene has found a possible time when we should be able to reserve the video conference rooms at SSCL, FNAL, LBL, SLAC and CIT. The proposed time is from 1:30 until 3:00 Central Time the fourth Thursday of each month. The next proposed meeting is June 24. While this is sure to conflict with other meeting at the various labs, it was the **only** time that we could find on the video conference room schedules. (The rooms that are the most heavily used, or at least reserved, are SSCL, FNAL and LBL. Another possible source of conflict is in the use of the ESnet video lines, of which there are only two.)

If anyone on the Acting Computing Subsystem Steering Committee has SERIOUS objections, please voice the objection to this newsgroup or send me e-mail AND BE PREPARED TO ASSIST IN FINDING ANOTHER TIME SLOT.

Within a few days, committee members at each site is expected to confirm the reservations, since this must be done by someone local to each site. A list of expected upcoming meeting dates will be submitted to ssc.gem.comp.

For those who plan far ahead, I will try to get some time in early December instead of the fourth Thursdays of November and December.

Gary Word



Search Keyword:

Document Title: SSC phone book

Document URL: <http://www.ssc.gov/ta1e.html>



SSC phone book

This information is provided for the exclusive use of SSC employees.

Directions

Please provide one of the following:

- surname
- first name
- phone extension
- cubicle
- mail stop

then hit RETURN, or whatever your system requires, to send the query. Partial entries are acceptable. All matches will be returned. Sorry, no email address, yet!

14

index search

Search Keyword: 003

Document Title: Untitled, URL http://www.ssc.gov/tele.html?2003

Document URL: http://www.ssc.gov/tele.html?2003



Name	Phon	Buil	Cubic	Mail
BOYER, BONNIELYNN M	2000	SR4	D248	2003
BURTON, JACKIE	3231	SR4	C199	2003
CHANG, S. CHARLES	6100	SR4	D261	2003
CORMELL, LAIRD R	6061	SR4	C181	2003
DANESH, NASSER	6032	n/a		2003
FREDERIKSEN, SOREN G	6166	SR4	D249	2003
GAUTHIER, ALAIN	2031	SR4	D246	2003
HIGHTOWER, PAUL W	6087	SR4	C169	2003
HILGART, JOHN M	1171	SR4	D256	2003
HUANG, JEAN A	6164	SR4	D258	2003
JOHNSON, TERENCE J	4499	SR4	D254A	2003
LIU, JOHN S	6146	SR4	D260	2003
LIU, YU D	6068	SR4	D256	2003
MCMILLAN, TERESA R	3000	SR4	C197	2003
MESTAD, STEVEN L	5244	SR4	D260	2003
NELSON, CATHY L	3031	SR4	C183	2003
NIXDORF, UTE D	6151	SR4	C186	2003
PAN, JING	5215	SR4	D257	2003
RIVENBARK, ROXANNE N	2003	SR1	240M	2160
ROBERTS, LEE	5098	SR4	D251	2003
SCHMID, DAVID J	3063	SR4	D254	2003
SCIPIONI, BRIAN L	5018	SR4	D245	2003
SELOVER, MARK A	6160	n/a		2003
SONG, TIAN TAI	5118	SR4	C190	2003
WHITE, RANDLE C	3012	SR4	C198	2003
WU, JIN CHU	6002	SR4	C177	2003

Search Keyword:

Document Title: SSC GOPHER server

Document URL: gopher://info.ssc.gov:70/



Select one of:

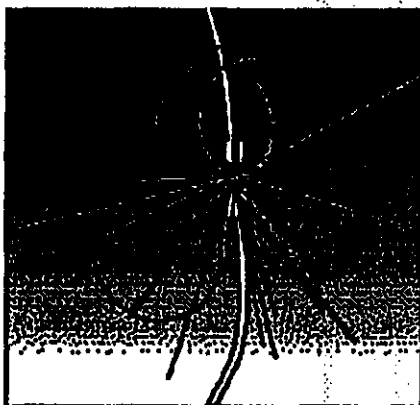
gopher protocol

- About the SSCL Gopher
- SSCL Library Information
- SSCL Job Bulletin Postings
- SSCL Documents
- Information and Documents
- Links to Other Libraries and Reference Works
- News and Information
- World Wide Web
- Internet file server (ftp) sites
- Other Gopher and Information Servers

Search Keyword: _____

Document Title: Superconducting Supercollider Controls Department

Document URL: <http://bear.ssc.gov/>



Welcome to the SSCL Controls Department

This is the SSCL Controls Department's multimedia information service, maintained by the communications group of the Accelerator Systems Division. It uses a program called xmosaic (an interface to the World-Wide Web) to provide any user access to information services - with text, sound, and movies! Click your mouse on any of the underlined words in this paragraph for more help.

SSC Information Services

Maps and Directories

Here is a map of the Supercollider campus

Local Libraries

?

Documentation

Here is a variety of documentation of SSC specific applications.

Network Services

Explore the worldwide networks! Here you can have access to libraries, databases, and all sorts of other services.

Site Maintainers

Search Keyword:

WWW usage since Wed. last week

571 accesses: of which

- 298 local (254 Stoneridge, 44 CF)

Access from

SLAC, YALE, CERN, NIKHEF, Northeastern, KEK,
and lots of weird places

Future Plans

- Implement document data base system to replace DTASS GUI (~1 month, needs blessing of DCC)
- Collaborate with SSC library, SLAC, CERN, (DESY) to bring implement viewing of preprints (long term). Meeting June 12th
- Get a dedicated machine for WWW serving at SSC. SPARC I/P + 2 GBytes disk seem available
- Become "real" project
- Xmosaic browsers for PC, Mac available soon

Document Title: Sybase Database

Document URL: file:/home/sscux1/gem/hilgart/www/chow.html



User's Guide for Document Database System

Introduction

This is a very preliminary document database server for bibliographic references to the SSC's DCC (document control center). Things such as GEM and SDC technical notes are accessible.

How to Make Queries to the Database

Search keywords, usually followed by strings, are combined with **boolean operators** (i.e., and , or) to restrict the search. The result is a brief title-page style listing of all articles (or notes, etc.) matching the request.

Both shortened and full version of each keyword is accepted. These are:

- au[thor] (e.g., mcfarlan)
- d[ate] (e.g., after 1992)
- k[eyword] (e.g., calorimeter)
- ti[tile] (e.g., technical)
- ty[pe] (e.g., note, drawing, memo, model, presentation)
- find (this is a dummy keyword for SPIRES addicts)

Boolean operators come in two forms:

- and [&]
- or [l]

Example queries:

find au mcfarlan and ti Cerenkov

Search Keyword: