

LISA 3.1se

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 addressline2 ftpforward lock-icon show-hardware
 MAXSAVE cleaning and deleting dumps.
 Send all explorer to thre LISA server.

Startpage: info

10. Configuration not available via the admin page.

Comments column

Contract info

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EIS Gold CD root.log

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When I refer to ~ it is the home dir of locexp
I prefer to set a passwd on locexp
and then login as the locexp user
before I do any testing.
This is the best way to configure and/or find errors.

1. What is Local Explorer and explorerdumps?

It's a way to store many explorer dumps on a web server, which makes it easy to find, browse and compare between system explorer dumps even retroactively. It stores up to 5 dumps which is equivilant to 2 months of message logs saved. It also runs some basic tests on disks, collects some data and presents it in a compact way.

explorer dump was orginaly created by Sun Microsystems and have the name structure SUNWexplot explorer.1122dd44ee.hostmname-2010.11.02.10.30.tar.gz

But now there is also an Linux version **LINUXexplo** maintaned by http://www.unix-consultants.co.uk/examples/scripts/linux/linux-explorer/
LINUXexplo explorer.1122dd44ee.hostmname-2010.11.02.10.30.**59**.tar.gz
The name structure of this dump is slightly different timestamt has seconds so whe can separate Solaris and Linux

2. What happens during installation

You may install the package in a directory of your choice e.g. If we select the /Sun as the installation directory, two subdirectories named SAlocexp and Salocexpwww will be created.

SAlocexp is compiled with the lighttpd web server (currently version 1.4.11) and all of the software required to unpack explorerdumps and create the web pages. SAlocexpwww contains all the webpages

/Sun/SAlocexpwww/htdocs/locexp/ [lots of pages and dirs]

It will install and configure the lighttpd webserver and test the configuration to confirm that a webserver is running on port 80. If this test is usuccessful you will be given the opportunity to select another port e.g. 81, 82, 8080 etc to access the LocalExplorer.

LISA startup is using the Service Management Facility (SMF)

Check status

svcs -a |grep lisa

startup

svcadm enable svc:/network/lisa-http:default

stopping

svcadm disable svc:/network/lisa-http:default

The installation process also adds a new user named locexp [uid=62001] on the host.

Uid=62001 is possible to change during installation.

It will also patch the /etc/mail/sendmail.cf file to allow this host to receive email and unpack them, the old sendmail.cf is saved in sendmail.cf.prelocexp.

The .forward file in locexp homedirectory will also be customised.

The following entry will be added to the crontab file

5 15 * * 1,4 bin/Get-latest-patchdiag-xref

The installation will start the WebServer and then send an email to user locexp on the host system.

This email will trigger the LISA to build the start page.

If this was the first time it will send me an email containing the version and what the system name is. It also send the emailadress you provided during the installation. I will send bugs and update information to this address but you can you leave this line empty.

You may also send suggestions directly to my email Sven.Adner@gmail.com

3. How to install SAlocexp

install it using pkgadd # pkgadd -d .Salocexp31se.pkg

Choose an install directory for the package.

The installation script will prefer /Sun but a different directory may be selected as long as all the directories above it in the filesystem have permissions set to 755 (see PROBLEMS).

Two sub-directories are created **SAlocexp** and **Salocexpwww**

SAlocexpwww will not be removed if at a later date this pkg is removed using the pkgrm command. A manual cleanup is required.

Quick tip. This directory is also a good place to clean up if disk space on the host system starts to become scarce i.e. too many dumps filling up your available disk space. This can be done as root goto **cd ~locexp/htdocs/locexp**

TMP. If you receive dumps from explorer version 3.5 or later the MIME unpacking requires temp storage under /usr/tmp. This will be in the /usr/tmp/m-prts-locexp and /usr/tmp/m-prts-x directories.

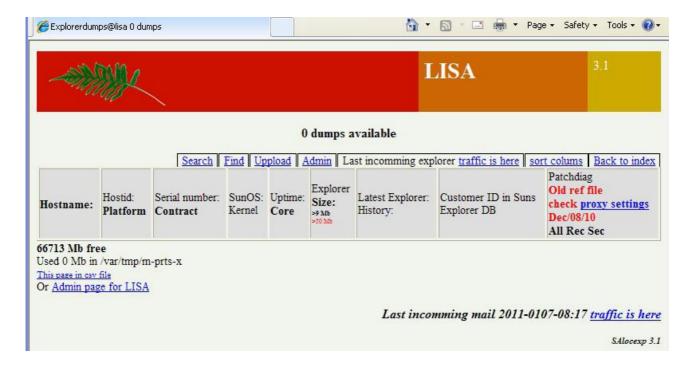
The installation process has been validated on the following OS versions:-

Solaris 10 are the preferred OS versions for LISA.

Upgrading from LISA version 2.2, 3.0 or 3.1se

Just do a pkgrm on the old pkg pkgrm SAlocexp And then install tha latest pkg from www.4lisa.info pkgadd -d SAlocexp31se.pkg

The picture below displays the initial web page after a successful LISA installation. URL: http://<YOURSYSTEM>/locexp/



4. How to configure the client

to send data to LISA

Explorer is included in the Services Tools Bundle(STB) login on the client.

Prior to this upload Bartsend to your client I prefer to install it in /opt/sun/bin

Re-run the explorer dump.

/opt/SUNWexplo/bin/explorer -q; /opt/sun/bin/Bartsend LISAserver /opt/SUNWexplo/output/ex*.tar.gz see also qls below

5. How to configure the client

The quickest way to set it up is to install the stb from oracle

The default explorer configuration file is found in the following directory

/etc/opt/SUNWexplo/default/explorer

Configuring explorer his is done by running explorer -g

Or try the new qls script

Before this go to the admin page at the bottom there is a link **Create and configure qls script in tools** klick here then this page displays

Download STB from MOS and se	etup qls script	
install_stb.sh missing ASRAssetBundle.3.6-201112061452	145233.tar.gz from /opt/SUNWswasr/ to / 233.tar.gz OK htdocs/tools direct from MOS use your log	*
MOS login Ex email		
MOS password		
Need MOS login and MOS password	to get STB	

tools dir where you Get and qls file is now Back to startpage

First to get this page working it will need 2 files

ASRAssetBundle.3.6-20111206145233.tar.gz and install stb.sh

The ASR file is coming from the ASR manager pkg SUNWswasr the install_stb.sh is somting to download from MOS You can try the login and password but it has problem whith some proxyservers and then you and then you need to copy the file your self there sorry for this.

When the files are correct this page will show up like this.



Download STB from MOS and setup qls script

install stb.sh OK

ASRAssetBundle.3.6-20111206145233.tar.gz OK

createing the qsl script

qls setup from /Sun/SAlocexp/htdocs/tools/qls.template

if you want to change the qls file

edit qls.template en rerun this page GetSTB.cgi

explorer deafaults is from a32_0b6a84be stripped from serial and hostid

if this is wrong create a file in tools named explorer_defaults.template whith correct explorer info and this will be used instead.

Use this one of the lines below on your clients

cd /tmp; /usr/sfw/bin/wget 192.168.11.88:80/tools/qls; ksh qls

/Sun/SAlocexp/htdocs/tools/qls IS READY

tools dir where you Get and qls file is now Back to startpage

Now you have configured the qls script (Quick Lisa Setup)

what it does is trying to do a clean fast install on your client. It gets thing from the LISA web tools directory by using wget to IP number the it runs the script and check if explorer is installed in crontab give you option to change or upgrade the client.

Investigate the qls.template if you want to change somting The defaul place to store the files on the client is /opt/lisa

Then rerun the Create and configure qls script in tools http://YOURLISA/cgi-bin/GetSTB.cgi

and then you have a new qls

On the clinent it will be somting like this

cd /tmp; /usr/sfw/bin/wget 192.168.11.88:80/tools/qls; ksh qls

Your version can you find at YOURLISA/tools in the file Get

TIPS first time on an empty LISA there is no system where the explorer defaults file cant be found ot it pickes the wrong system

In this case create an explorer_defaults.template whith correct explorer info in the tools directory and this will be used as an template instead.

6. How do I access LISA

Check the **http://YOURSYSTEM/** web page to see if the index page was created during the installation.

The default Pasword is **asil**. Change this by editing the ~locexp/.passwd file. This is not possible on web need to login to the locexp host.

7. Information displayed on the indexpage system row

	Different colors means problems in disk mirrors. Suncluster version is displayed.
2a6e823e VMware, Inc. 0bcd0e51 HP ProLiant DL380 G3	System type displayed under hostid.
VINGA 3 Hard Tape Errors	Tape errors displayed in red text.
	Disksuite problems displayed here.
	Problem in Veritas and 14 ECC memory errors detected

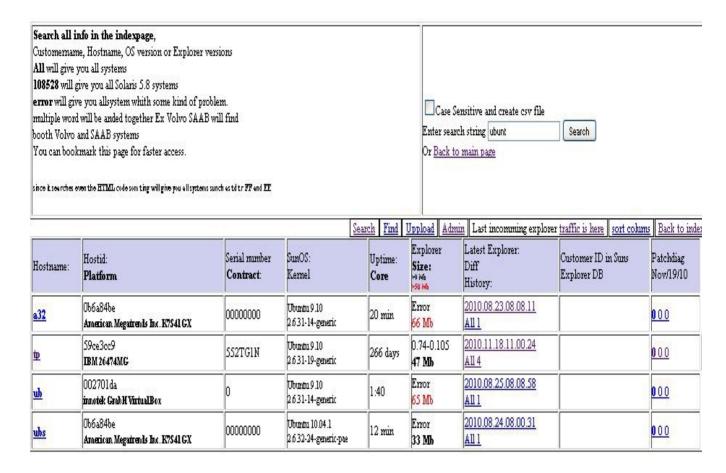
8. Search

You can search the text fields on the indexpage for information e.g. Part of hostname or multiple hostnames. One or more criteria is possible.

Tip: Searching for common HTML codes can lead to problems if you use FONT SIZE or HREF in the search criteria. The output will include all lines in the result.

If you check the Case Sensitive box you will get a csv file for your specific search.





9. Configuring and Customizing

is done one the Admin.cgi page

The password to admin page was displayed during the installation. Alternatively it can be found in the .passwd file in the locexp home directory. The password is

changeable if required.

Adminpage - Wrong password to change settings

You haven't entered a correct password. It's possible only to view the settings.

Wrong passord to change settings Enter view only mode. Current settings for LISA is	
mail notification is being sent To: sven.adnen@gmail.com	
mail notification is being sent 10: sven.agnen@gmail.com	Back to main page
Your active patchdiag.xref is from Nov/19/10 Get new patchdiag file now	proxy configurations
incoming dumps is Mail forward transfer No mail forward DEFAULT http forward to other LISA server using Bartsend no forward https forward to Sun using OpenSSL Toolkit sft forward to Sun Fip forward No ftp https or sft forward DEFAULT	https is NOT tested This must be configured to get new patchdiag xref Test transport Commit and uppdate changes before testing Use proxy config proxyserver:port Use proxy authentication login:password Use CA certificate that can verify the remote server. DEFAULT Curl in cli mode
indexpage look White bg on indexpage Color on disk mirroring errors DEFAULT To implement this change the indexpage need to be rebuilt to become active. No icons Icons on indexpage showing errors DEFAULT To implement this change both the indexpage and hash need to be rebuilt to become active.	indexpage look No Addressline2 groups Show Addressline2 groups DEFAULT To implement this change the indexpage need to be rebuilt to become active.
 Display news banner DEFAULT Turn off news banner To implement this change the indexpage need to be rebuilt to become active. Group on State: instead of Address line2 Group on Address line2 DEFAULT To implement this change the indexpage need to be rebuilt to become active. 	No Hardware groups Show Hardware groups DEFAULT To implement this change the indepage need to be rebuilt to become active. No keyswitch icon Keyswitch icon DEFAULT To implement this change both the indepage and hash need to be rebuilt to become active.
Archiving options and file sizes Number of explorerdumps to save 5 von all systems 5 is DEFAULT Minimum filesize to shrink 50000000 vol 50 Mb [50000000] DEFAULT Select 0 to turn off This function reduces files larger then 500000000 bytes and does a tail -1200 and delete the rest	rebuild options Rebuild indexpage now quick Rebuild indexpage and hash. This will take some time needed for changes in comments txt, contract txt and keyswitch icon Rebuild indexpage, hash and infopage. This will take even longer time, prepare to wait It will also rebuild patchdiag and mapdev A quicker way to rebuild a single host is to resend the dump

Mail forward transfer: All incoming dumps are forwarded to <u>explorer-database-emea@sun.com</u>. It uses the template file ~locexp/.forward-local. This will soon be OBSOLETE

White bg: The background will never turn red/yellow/orange to state bad mirroring **No icons:** The help icons explaining what the icons mean is never dislayed.

Display news banner: Displays inforamtion sourced from my website regarding the status of LISA development. This is a java script inline that downloads the information from http://www.4lisa.info/LISA/stat/3.1news.js

Check for ftp forward: All incoming dumps are forwarded to Sun via ftp to IP number 192.18.99.145. Performed by the script bin/Put-ftp

Check for no Hardwaregroups: Remove the hardware grouping see example below.

Check for no keyswitch icon: Removes this icon but you need to do a rebuild index and hash.

Rebuild indexpage now (quick): This will only change the page if you have deleted systems and then updated the Mb left.

Rebuild indexpage now and hash: (this will take some time) This operation is necessary if you have change contracts.txt or comments.txt referring to new incoming dumps.

contracts.txt this file can exist beside the comments.txt if there is a line whith serial this shows up as PSS all others system shows up as NOT CONTRACT

SFT Secure File transfer the pkg SUNWsftransport can be downloaded from www.oracle.com in MOS

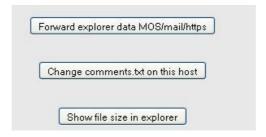
Get new patchdiag file now
incoming dumps is
O Mail forward transfer
No mail forward DEFAULT ✓
○ http forward to other LISA server using Bartsend ono forward
Ohttps forward to Oracle using OpenSSL Toolkit show https log 4 transferd
O sft forward to Oracle Secure File Transport appears to be
installed but I can't use the /var/opt/SUNWsftransport/transfer directory for writing.
If you want to use sft to transport explorer files then please do a
chmod 775 /var/opt/SUNWsftransport/transfer
as root.
OFtp forward show ftp log 2 transferd
● No ftp https or sft forward DEFAULT ✓

LISA automatic detect if you have sft installed and the only thing to do is make the transfer directory writeable for locexp.

Then you can forward explorer to oracle and direct send explorer to SR ins MOS

To send an explorer directly to a specific case you must have the SR number

select the info page of the host that have the SR click on Forward explorerdata MOS/mail/https button



Fill in the SR number 3-55xxxxxxxx then start MOS upload

If you have tested the https on the admin page the upload will use supportfiles.sun.com but if the sft is configured and the transport directory is writeable for locexp sft will be using this instead.

Observe that supportfiles.sun.com will be EOL early 2013.

Using sven.adner@gmail.com as return adress

Testing direct to https://supportfiles.sun.com

Server: Apache Location: https://supportfiles.sun.com/upload

https://supportfiles.sun.com WORKING using this

dump will go to Europe/EMEA explorer-emea MOS

Select which dump to send latest is selected



Select encoding type in your mail/net

uuencode	One big mail containing all data. Best choice if Windows base mail server has virus scanners.	
mime	splitted in separate mail max size is selectable. Sometimes this type get stuck in Windows-based relay running MIMESweeper.	
https	https transport using OpenSSL Toolkit only upload to Oracle	
Bartsend	A http based transport only to transfer between LISA servers	
sft	Needs extra pkg SUNWsftransport	
MOS	Tag an explorer whith Service Request number	

Secure File Transport appears to be

installed but I can't use the /var/opt/SUNWsftransport/transfer directory for writing.

If you want to use sft to transport explorer files then please do a

chmod 775 /var/opt/SUNWsftransport/transfer

as root. MOS

Send explorer direct to MOS My Oracle Support

Enter SR number here ex 3-259nnnnnnn



10. Configuration options not available via the Adminpage

You can also perform a complete reset by manually removing .noty in the locexp home directory and .noty-run if the file exists. When complete, send an empty mail to locexp

What is the latest version of explorer: Edit the file latest-explorer, all other versions will show up in red on indexpage

Comments column: You may add extra columns to display extra information. Simply create a file in the base of web called comments.txt.

The path to this file should be /Sun/SAlocexpwww/htdocs/locexp/comments.txt if the pkg is installed in /Sun directory. Alternatively, use the link in locexp home directory. vi ~locexp/htdocs/locexp/comments.txt

Add one line for each host. The entry must start with the HOSTID e.g.

```
8091ccd2 This system is only for test 809193fe Backup system
```

Contract

in the nearly the same format as comments.txt but based on Serial number there is a file contract.txt

vi ~locexp/htdocs/locexp/contract.txt

Startpage banner and info: The text on the top of startpage is configurable. It's possible to enter your personal site information. Edit the file ~locexp/htdocs/locexp/index.tpl.

This file contains HTML codes.

The ~locexp/htdocs/locexp/index.tpl is preserved during a upgrade. The original file is saved in the locexp home directory.

There is an English version, index-eng.tpl in this directory.

11. Additional explorer files

Change log root.log: Some installations have a mandatory file in which all changes to a system are documented. This file can be named /root.log and is collected by the explorer -f /root.log. It is displayed on the information page.



if the explorer dump is version 2.5.x or newer its capable of sending the special file [explorer opting -f /root.log]. This information will show up on the information page under the contract info heading.

EIS CD Gold CD

If the system is installed from a EIS CD see image above.

12. Patchdiag:

During installation a line in locexp crontab entry is added. This line is configurable as required.

```
5 15 * * 1,4 bin/Get-latest-patchdiag-xref
```

The date of the patchdiag is visible in top right column.

NOTE: Don't forget to change the configuration if a ftp-proxy server is used.

13. NOTE:

The first time the locexp unpacks an explorer dump, it sends an email to sven.adner@gmail.com, containing the version of locexp and the name of the Customer ID this function helps me to keep track of all installations. E.g.

```
Subject: 3.1se Customer Name: Company AB 2001-0628-11:46
```

14. VOID:

To be filled whith somting

15. Problems and testing

To trace the status of uploads to locexp run

```
# tail -f ~locexp/incoming.log
```

This file is updated in real time from all the scripts. The output can appear a little clutered if there are multiple dumps arriving on the system.

If no output is received when you sending mail to locexp, check all directories above the Salocexp directory. If any directory has 775 mode then mail wont work.

Group rights MUST NOT be x7x

Some system have these permissions changed to 755

```
drwxrwxr-x 10 root sys 512 Feb 8 14:03 opt/
```

If you prefer not to set these permissions please install the pkg in another directory. Mail systems tend to refuse requests to send mail to users that have their home directories located under group writable directories.

If the indexpage is still not created then check the /var/log/syslog file for errors. You probably need to change your mail setup. Check that its possible to send mail locally

/usr/lib/sendmail -v locexp@THISHOST.sun.com

For further information see the # man sendmail page in Solaris.

Testing:

Before testing the installation a password must be configured on locexp. Perform all tests as the user locexp.

All scripts are written to start from mail It is NOT possible to run them as root

16. Special files in locexp home dir

.noty If this file exists, only incoming systems will be updated on startpage normal. The first time after an upgrade to newer version of LISA this file does not exists and will cause all systems to be rebuilt. Including .row info.html and patchdiag.html and mapdev.html file which will take a long time to complete.

If you remove this file the next incomming dump or mail will cause the infopage and the index.page to be rebuilt, which will take a long time to complete.

.noty-run Exists during the first rebuild. No incoming dumps will be processed to create the info and index pages. New dumps are stored in a queue to be processed at a later time.

This can be a problem if a system is rebooted during the first rebuild after a pkg upgrade. The fix is to remove the **.noty-run** file and send a short empty mail to locexp.

FTP forward

doftp If this file is empty, all incoming dumps are forwarded to Sun via ftp.Most intranets can handle an IP number better than the real name, which is currently is

supportfiles.sun.com
But might be cnaged bu Oracle in the future

The address can be found in the **bin/Put-ftp** file

FTP=supportfiles.sun.com

If **doftp** is not empty it must contain the hostids of the systems you want to forward

HTTPS forward

dohttps File indicates that all incomming dumps will be forwarded to sun via http bin/Upload-https

https uses curl and the OpenSSL Toolkit. The binary is striped down to a minimum to save space. The documentation and the full toolkit is available for download from

If **dohttps** is not empty it must contain the hostids of the systems you want to forward

SFT forward

dosft File indicates that all incomming dumps will be forwarded to sun using sft **Sun Secure File Transport**

.sftdir is a file containing one line of the path to the transfer directory where the explorer dump is expected to be copied to for transfer to Sun

BLOCK all forward

noupload is a file containg hostid on Solaris system not to be uploaded this prevents booth ftp, https and sft to send the explorer to Oracle

.proxy Contains the adress and port to the proxyserver with the following syntax.

www.server.com:8080

.proxy-pass Contains the user and password information for proxyservers that need authentication with the following syntax: **username:password**

.proxy-pass-active Indicates that proxy authentication will be used.

.proxy-active Indicates that the proxy configuration will be used when https upload is used manually or in the forward mode

.proxy-test Contains the last answer from proxy during test

.http-ok File indicates that https transport has been tested and is working.

.https-dest Contains the destination for the explorer dump. For EMEA

destination=europe-cores/uk/incoming

For Americas and APAC

destination=explorer

.hw displays the HW grouping on indexpage

.whitebg Never show disk mirroring bg colors on startpage always white

.addline2 Show the address line 2 grouping

.news This file does not exist by default. When created a news banner is displayed at the bottom of indexpage. This file is located on a WebServer on internet. This is allows me to display a short message on the bottom of the page. This line has been enabled on all beta releases of LISA and on version 2.0 and higher. You can turn it off if you want via the Adminpage.

- .usermail This file contains your Email return adress otherwhise locexp@`uname-n` is standard
- **.passwd** The password used in Adminpage is not configurable via the web gui. This file is the only way is to change the password.
- **.Move** Used only once during installation/migration from older LISA versions.
- **.setup-sparc.i386** Used only once during installation to select binaries between SPARC and x86 architectures.
- .smf-install: Used once by installation to setup smf (svcadm etc)
- .netrc The standard file for setting up connections to external ftp servers. Syntax machine 192.18.108.40 login ftp password locexp@

Set up usage if you need to use a internal ftp-proxy

machine your-ftp-proxyserver login ftp@192.18.108.40 password locexp@

192.18.108.40 is the IP for sunsolve. Sun. COM

If your site can handle external dns names you can use the name instead

.late This file contains he latest arrived explorer systems hostid Is used to create the latest link on indexpage
The lates incoming dump is also colored gray on the indexpage

- .xref Created after a successful get of new patchdiag.xref. This is performed by the script bin/Get-latest-patchdiag-xref
- .forward See Solaris documentation
- .forward-local Template file for .forward cp by Admin.cgi
- .forward-emea Template file for .forward cp by Admin.cgi
- .ca curl will Use CA certificate that can verify the remote server.
- .cb Classic or 2005 colorstyle OBSOLETE

Miscellaneous files

These files are located in the

/Sun/SAlocexpwww/htdocs/locexp/SYSTEMNAME_HOSTID/ directory where the dumps are unpacked

mapdev.html Is generated if the system has perl installed. It's a ssd0 to c0t0d0 mapping table not found in explorer. Useful for exploring message files.

.row html table data is in the

/Sun/SAlocexpwww/htdocs/locexp/SYSTEMNAME_HOSTID/ directory for faster indexing.

- .size Is the data file for Admin.cgi
- .csv Pipe seperated data to build the allsys.csv file for import to Staroffice
- .mossr if there has been an upload to My Oracle Support the Request Number is in this file

17. Icons and background colors



Problem in Veritas



Problem in rm6 Raid Manager or StorEdge 3510 3511



Problem in disksuite Needs maintenance or metadb problem



Fan error



FMA error



Node is not a member in cluster



System installed which EIS Gold CD



System has some ECC memory errors



System has front key in locked position



Powers problem

Colors below is only regarding Veritas

Volume has different numbers of controller on mirrors AND Volume has mirror on same controller

Volume has different numbers of controller on mirrors

Volume has mirror on same controller

18. Add password to webserver

Edit the file ./lighttpd/lighttpd.conf

#
Uncomment next line for access controll
#include "lighttpd.auth.conf"

19. User scripts on the Infopage and Search all files page

From LISA version 2.1, it is possible to create specialised scripts. There are two ways to do this.

One is displayed on the info page that is created for each host. This is run via the bin/Do-info script.

The line that calls it is

[[-e \$BASE/../SAcustom/Do-custom]] && \$BASE/../SAcustom/Do-custom \$1 \$2 \$3

The path is above LISA's homepage and is called SAcustom The 3 args are:-

\$1 is INEX Incomming EXplorer this is the full path to the root of the explorer

E.g.

BASE/SAlocexpwww/htdocs/locexp/system_88eeff22/explorer.88 eeff22.system-2005.09.08.14.19

to obtain the vfstab file in an explorer dump, use cat \$1/etc/vfstab

\$2 is LEX name is the Latest EXplorer file without all / removed

E.g. explorer.88eeff22.system-2005.09.08.14.19

\$3 DATA, the directory name in the format **system_88eeff22** used to access BASE/SAlocexpwww/htdocs/locexp

Output is in HTML format. Do not use HEAD or BODY tags. It shows up before the Disks subsystems: box

The the second way is when you search all explorer dumps for some specific information or searching the latest dumps. This script is located in the same place but is named Snn-anyname. nn is any number e.g. **S5-finding-all-segatedisks.** Some examples are available in the custom-template.

Once args are provided as with \$1, which is in the BASE install path

E.g. BASE/SAlocexp

it's possible to access all dumps from htdocs/locexp/system_88eeff22 ... and so on



Last change 2013 11 28 comments send to Sven Adner@gmail.com Rev doc31se.v9