

AMS HRDL Configurations SOP (DMC)

DMC

Item	SOP number	Description
1	AMS-SOP-6.16.A	A. AMS Configuration 1, Laptop connected
2	AMS-SOP-6.16.B	B. AMS Configuration 2, Laptop disconnected
3	AMS-SOP-6.16.C	C. AMS Configuration 3, Payload and Laptop downlink
4	AMS-SOP-6.16.D	D. AMS Configuration 4, Laptop only downlink
5	AMS-SOP-6.16.E	E. AMS Configuration 5, AMS Disconnected
6	AMS-SOP-6.16.F	F. AMS Configuration 6, Alternative Payload and Laptop Downlink
7	AMS-SOP-6.16.G	G. AMS Configuration 7, Alternative Laptop downlink

AMS-SOP-XX: Transfer File from Laptop to AMS

with A.Basili, X.Cai or A.Lebedev to support LEAD
with G.Alberti, P.Goglov or V.Koutsenko to support DATA

Step	Station	Procedure																								
1	DATA	<p>Verify files to be transferred are in <code>~ams/pdennett/eAss/ext-bin/</code></p> <p>JMDC List:</p> <table border="1"> <thead> <tr> <th>Local File Name</th> <th>JMDC File Name</th> <th>Local Size</th> <th>JMDC Size (+4B)</th> </tr> </thead> <tbody> <tr><td>1.</td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td></tr> <tr><td>...</td><td></td><td></td><td></td></tr> </tbody> </table>	Local File Name	JMDC File Name	Local Size	JMDC Size (+4B)	1.				2.				3.				4.				...			
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1.																										
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4.																										
...																										
2	LEAD	Confirm AMS is in nominal JAP operations.																								
3	LEAD	Via JMDC-C: check if the file to be transferred does not exist in JMDC, otherwise - erase it.																								
4	LEAD	Brief PRO on this activity (only if we need to change HRDL configuration), see next																								
5	DATA	If AMS HRDL link is not in configuration 1, ask DMC to change AMS HRDL to configuration 1 per AMS-SOP-6.16.A																								
6	DATA	On ALControl PING-AMS-1.seq Verify response																								
7	DATA	<p>Via <code>ddrs_sh</code>: Perform <code>jftp</code> transfer with the following command:</p> <pre>echo "~ams/pdennett/eAss/cmdr/jftp -h localhost -p hrdl -f <jmdc file name> -u ~ams/pdennett/eAss/ext-bin/<local file name> -n <node address> 2>&1 > /tmp/jftp.log" at now</pre>																								
8	DATA	Using <code>tail /tmp/jftp.log</code> to verify transfer finished																								
9	LEAD	Via <code>jmdc_mon -m hosc</code> verify JMDC message for file transfer completed																								
10	LEAD	Via JMDC-C: Verify file is present and size correct																								
11	LEAD	Repeat step 7-10 for all files and all JMDCs																								
12	DATA	If AMS HRDL was not in configuration 1, ask DMC to change back per AMS-SOP-6.16																								
13	LEAD	Brief PRO on activity outcome																								

AMS-SOP-XX: Reload JMDC Software (JAP)

with A.Basili, X.Cai or A.Lebedev to support LEAD

Step	Station	Procedure		
1	LEAD	Verify JAP to be loaded: <div style="text-align: center;"> <table border="0"> <tr> <td>File Name</td> <td>File size</td> </tr> </table> </div> JAP: Restore:	File Name	File size
File Name	File size			
2	LEAD	Read the current TQ-List Items and Scheduled times		
3	LEAD	Prepare the TQ-List files for DAQ (daq-tq.com), DSP test (dsp-test.com), GPS (gps-epoch.com, gps-gale.com) and Star Tracker (???) according to the time in old list.		
4	LEAD	Brief POD and PRO that this activity will cause brief loss of housekeeping but nominally not dark fiber. Request varification that the selected mininum 30 minute command window appears to have clean communications.		
5	LEAD	Stop DAQ.		
6	LEAD	Stop JBUX playback.		
7	LEAD	Using JMDC-A to Load JMDC software from JMDC flash memory		
8	LEAD	Using JMDC-A to check JMDC status and see if JAP is loaded correctly		
9	LEAD	Using JMDC-B to open jmdc_recovery.txt to make all recovery steps from there.		
10	LEAD	Depend on HRDL downlink rate, inform detector experts to check their data after new data to ground, restart CHD monitor display		

AMS-SOP-XX: Reboot AMS via Laptop

with A.Basili, X.Cai or A.Lebedev to support LEAD

with G.Alberti, P.Goglov or V.Koutsenko to support DATA

Step	Station	Procedure
1	LEAD	Brief POD and PRO that this activity will cause loss of housekeeping and dark fiber (managed). Request verification that the selected minimum 30 minute command window appears to have clean communications.
2	DATA	Ask DMC to change AMS HRDL to configuration 5 per AMS-SOP-6.16.E
3	DATA	Send boot command to AMS through AMS laptop by using command: /pocchome/common/bin/seq -s feplr:61012 -c "seqt --noreply w <jmdc number + 4> 0" During this step 1553 HK will stop (if active) and HRDL fiber will go dark.
4	LEAD	Using JMDC-A to set ownerships. At this point 1553 HK is started with JROM CHD format.
5	LEAD	Load JMDC JAP software. At this point 1553 is restarted with normal CHD format.
6	LEAD	Using JMDC-A: Turn on HRDL light and HRDL data output. At this point HRDL output is back to normal.
7	DATA	Ask DMC to change AMS HRDL to configuration 1 per AMS-SOP-6.16.A or to the configuration before this procedure.
8	LEAD	Configure HRDL output rate
9	LEAD	Using JMDC-B to open jmdc_recovery.txt to make all recovery steps from there.
10	LEAD	Depend on HRDL downlink rate, inform detector experts to check their data after new data to ground, restart CHD monitor display

AMS-SOP-XX: AMSfep Exchange

with G.Alberti, P.Goglov or V.Koutsenko to support LEAD & DATA

Step	Station	Procedure
1	LEAD	Call to stations: DATA, DATA-Prime, and IT. The current active AMSfep is pcgsc51. This procedure will transition the active AMSfep to pcgsc50.
2	DATA + DATA Prime	Confirm proper operations and configuration for PDSSfep2 on pcgsc50
3	DATA	Stop PDSSfep2 on pcgsc50
4	DATA	On pcgsc50: Remove all DATA files from /DATA/FRAMES
5	LEAD	Stop JBUX Playback. Set Hi Rate Data Output Mode to 1:JBUX. Disable TQ-List items to start JBUX playback.
6	IT	Confirm bbftp has transferred all files from current prime AMSfep (pcgsc51) to pccosp0.
7	IT	Remove bbftp from pcgsc51 crontab Stop bbftp on current prime AMSfep (pcgsc51)
8	DATA	(Pavel working on script for this step and next) For each stream in the list below that exists on pccosp0 record the current file id: /DATA/FRAMES/HKLR/RT /DATA/FRAMES/HKLR/HCOR /DATA/FRAMES/HKLR/PB /DATA/FRAMES/HKHR/RT /DATA/FRAMES/HKHR/HCOR /DATA/FRAMES/HKHR/PB /DATA/FRAMES/SCI/RT /DATA/FRAMES/SCI/HCOR /DATA/FRAMES/SCI/PB /DATA/FRAMES/HKALC/RT /DATA/FRAMES/HKALC/HCOR /DATA/FRAMES/HKALC/PB /DATA/FRAMES/SCIBPB/RT /DATA/FRAMES/SCIBPB/HCOR /DATA/FRAMES/SCIBPB/PB /DATA/FRAMES/HKBPB/RT /DATA/FRAMES/HKBPB/HCOR /DATA/FRAMES/HKBPB/PB /DATA/FRAMES/HKRPB/RT /DATA/FRAMES/HKRPB/HCOR /DATA/FRAMES/HKRPB/ /DATA/FRAMES/SCIRPB/RT /DATA/FRAMES/SCIRPB/HCOR /DATA/FRAMES/SCIRPB/PB
9	DATA	On pcgsc50: For each stream above with a recorded file id create appropriate subdirectories and 'touch' the largest file id to create an empty file as a place holder.
10	DATA	"service PDSSfep2 start" on pcgsc50
11	IT	On pcgsc50: Install bbftp in crontab and start bbftp
12	DATA	The current active AMSfep is pggsc50. During next AOS carefully monitor PDSSfep2 and bbftp functions on this system.
13	LEAD	Set Hi Rate Data Output Mode to 2:JBUX+. Start JBUX Playback. Enable TQ-List items to start JBUX playback.

AMS-SOP-XX: Changing HRDL JMDC

with A.Basili, X.Cai or A.Lebedev to support LEAD
with G.Alberti, P.Goglov or V.Koutsenko to support DATA

Step	Station	Procedure
1	LEAD	Turn on the JMDC to be new HRDL owner if it is off
2	LEAD	Load JAP software in JMDC to be new HRDL owner
3	LEAD	Brief POD and PRO that this activity will cause dark fiber (managed). Request verification that the selected minimum 30 minute command window appears to have clean communications.
4	DATA	Ask DMC to change AMS HRDL to configuration 5 per AMS-SOP-6.16.E
5	LEAD	Using JMDC-A to set new ownerships. At this point 1553 HK is started with JROM CHD format.
6	LEAD	Load JAP software on HRDL owner JMDC again to make sure it takes new configuration according to ownerships.
7	LEAD	Using JMDC-A: Turn on HRDL light and HRDL data output. At this point HRDL output is back to normal.
8	DATA	Ask DMC to change AMS HRDL to configuration 1 per AMS-SOP-6.16.A or to the configuration before this procedure.
9	LEAD	Configure HRDL output rate
10	LEAD	Using JMDC-B to open jmdc_recovery.txt to make all recovery steps from there.
11	LEAD	Depend on HRDL downlink rate, inform detector experts to check their data after new data to ground, restart CHD monitor display