Enterprise Historian TM History Services

Version 2.4 Patch 13

Release Notes



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Section 1 Introduction

Product Overview

These release notes describe patch 13 for Enterprise Historian History Services version 2.4 for the HP-UX platform.

This patch can be applied to systems with Enterprise Historian version 2.2, or OS1.8/nPm where n = any version of OS 1.8, and m = any patch. The patch is all-inclusive so it can be applied to History version 2.4 at any patch level.

The problems fixed by this patch are described in Section 2, Functionality. Instructions for installing this patch are provided in Section 3, Installation.

Prerequisites and Requirements

The History Services software on the Enterprise Historian or Operator Station platform must be at Version 2.4 to install this patch.

Section 2 Functionality

Fixed Problems

Table 1 describes the problems that are fixed by patch 13. Problems fixed by earlier patches which are also included in this patch are described in Table 2 through Table 10.

Table 1. Problems Fixed by Patch 13

ID	Description
2015	Prior to this patch, when a remote system had a server that was hung, a response was never returned to the omf client. This problem has been fixed.
1577	The memory leak problem in hsLogMan (hsLogMan grows when UserAPI modifies a numeric log) has been fixed.
2256	Prior to this patch when the event log was configured to collect just process section 0 messages, it collected ALL messages. The event log now collects just the specified messages.
2223	hsPDLstorage oracle warnings are now reported as errors.
2071	Requests to activate/deactivate logs through RTS display sometimes failed on first try. Such requests are now successful on the first try.
2016	Collection no longer crashes when a secondary log is deactivated.
2014	Date/time handling has been corrected to support compatibility with the Enterprise Historian 3.2/1 on the Windows platform.
2013	A script is now provided to create the ops\$ocshis user on the Enterprise Historian 2.2 platform to support PDL consolidation on the Information Manager 3.5 Enterprise Edition. The procedure for running the script and setting up PDL consolidation is described in <i>Inform IT Scheduling Services Configuration</i> .
2012	Entries in the log_source table are now deleted as they should be when composite logs are deleted.

Table 1. Problems Fixed by Patch 13

ID	Description
2011	printf for generic errors has been corrected so that dbConfig, history builder, and other tools that use this function no longer crash on such errors.
1685	In patch 12, hsBAR was changed to not allow backup of a running system with PDL configured. hsBAR aborted the backup if History was running. This interlock was implemented to prevent inconsistencies that could occur in a backup image when the backup was done at the same time PDL data was being collected and stored.
	Patch 13 removes this interlock so that on-line backups are now permitted. If you are using PDL and you perform an on-line backup, it is possible that the data stored during the backup will not be consistent. If this occurs, the subsequent restore may have a problem enabling constraints on the PDL tables.
	Check the hsBAR log file for constraint errors after every hsBAR restore opreration.
	If you attempted an on-line backup while collecting PDL data, and you have problems restoring the data, contact the Technical Support Group via SUPPORTLINE - U.S.: (1-800-HELP-365); International: (1-614-224-5888).
	One possible work-around for future back-up operations is to pause TCL and/or Batch 300 while hsBAR is executing.
1513	Prior to this patch, when archive attempts for an archive group failed to the point where the archive buffer size exceeded the space available on any archive volume, all archive volumes would be marked as full (even though they may be empty).
	Now, if History is trying to archive data from a time interval that is greater than 2 scheduled archives, the end time for the archive group is reset to allow the archive to fit on an archive volume.
2300	The problem that caused the hsLogMan process to crash unexpectedly has been fixed.

Table 2. Problems Fixed by Patch 12

ID	Description
1457	Corrected section filter conversion for Event Log configuration.
1446	Changed LogSet display to correctly display states.
1432	Corrected collection crash when deactivating a dual log which is failing over.
1428	Corrected parsing issues with dbChanges file.
1409	Corrected restore of PDL modify columns.
1399	Data is stored correctly for Eventlogs messages. This is fixed by the post installation procedure described in Post Installation on page 25.
378	Previously PDL was corrupted after restore from hsBAR, if History was running while the backup was being created. Now hsBAR will not allow History back up with PDL while the system is running.
1374	Fixed crash that occurred when activating user-supplied log.
1352	Conversion will no longer corrupt numeric data for large logs when conversion is executed twice.
1327	History config can now be migrated to Enterprise Historian 3.2/1.
1313	Retrieval of next entry when countRequest is specified no longer fails.
1312	When restoring a log, verify that corresponding runtime log exists.

Table 3. Problems Fixed By History 2.4 Patch 11

ID	Description
829	In history builder the Archive -> View Report logs option now works correctly, so you can search for reports in view report log window.
893	Archive volume transition no longer halts if the first archive after it returns a failure.

Table 3. Problems Fixed By History 2.4 Patch 11

ID	Description
895	The Update Status command in RTS display no longer waits for History to restart.
905	dbconfig no longer crashes on load when secondary log exists with no primary log.
920	The dbConfig stats output, created when checking dbLoad files, now adjusts the Oracle space needed for OPC/Audit message logs.
960	Audit Trail Log no longer causes the History Builder to crash with the following error: "hsBuilder.exe has generated errors and will be closed by Windows. You will need to restart the program. An error log has been generated."
1002	When restoring any data from any archive, hsArchive will not crash.
1048	hsArchive process no longer closes STDIN handle.
1176	Running PDL and Reports through TCL statements no longer causes hsModInterface to crash when a PDL 'end batch' and a Report command are sent very close to each other.
1180	MOD 300 timestamps are now reported correctly(no longer off by 1 hour) when times older than the last time change are passed from the ModInterface.
1191	Deleting a report log now deletes reports in Oracle and tablespace used by that log is freed up.
1226	Conversion no longer fails for PDL upgrade.
1239	When merging data directories, hsBAR now correctly updates size quotas
1251	hsBAR backup now works correctly for MasterOS.
1253	resource occurrence can be a random number. When recording resource Associations from the hsModInterface, it is possible that the occurrence number is not zero. This is occurring because the typeDir treats the values as an output parameter only. Since the value is always zero for this transaction, the value can be force to zero inside PDLstorage

Table 4. Problems Fixed by History 2.4 Patch 10

ID	Description
216	In cases where only one numeric log exists in a composite log and no CCF or PHL logs are defined (or the time span for the request is outside the timespan supported by PHL or CCF), the logManager will not switch to the restored log, if available, when the accessName is the requested name. (BaseHistory, MOD 300 only).
431	On MOD300 CDP nodes, a timing issue between the start of MTOS and the OMF tasks on the RTAB can cause the OMF in the host OS (NT or UNIX) to fail to resubcribe on Node UP for the RTAB. This prevent the logManager from seeing ALL MOD300 nodes (history and controllers) on the DCN. When this occurs, no trend data can be retrieved from the logManager. (BaseHistory and History, MOD 300 only)
460	Bulk Data Export fails when getting more than 3200 raw data values.
461	BDX loses parameter default values.
462	BDX cannot get raw data for a single synchronous log, nor can it get interpolated data for a single asynchronous log. Two or more logs must be specified to have raw data returned.
489	Fixed crash in History Builder when filtering entries in View Archive Media window. Also removed time field in filter and search dialogs for log entries as that field appears to be completely useless.
495	hsModInterface crash with dead messages. This could occur using PDL when the Start_Batch message was missed. The END_BATCH would not cause the interim messages to be stored in PDL, and the hsModInterface process would eventually fail.
503	Activating a log and then deactivating before it goes from pending to active, causes the log to go to translating and stay there. Attempting to deactivate again causes a dialog saying that it is already not active.

Table 4. Problems Fixed by History 2.4 Patch 10

ID	Description
604	Auto archiving of Profile PDL data on Batch end has been seen to not work on occasion. The problem is resolved by restarting History at which point all the PDLs that could not be archived at their appointed time are archived (MOD 300 and Profiles only).
605	An auto/manual archive of a PDL containing associations to multiple Profile Logs only contains archive data for the PDL and the first log in the association. The other logs, even though they contain data, have no data in the archive entry. (MOD 300 and Profiles only).
672	In AdvancedHistoryBuilder, if the user chooses tools>global messages and tries to choose edit>clear the program will crash. This only happens if there is at least one message in the display.
673	Fix dbConfig crash when like log name matches one of the names of a fully configured log.
704	Remove composite log typical object from history server runtime tables when last log in a typical is deleted. If a new log with a typical is created and the typical name is the same as the old one, History Builder will report an error saying that the name already exists, even though it was deleted.
714	Corrected purge future dates to work properly with files that have super index block. Also added a utility option to fix the files that have been corrupted with the "hsDBMaint -purge" before this fix was applied.
715	When asking for data in time range completely after any log data, "hsDBMaint - bdx" has a potential of crashing or simply not returning what it is supposed to return, which is NoData points for the entire requested interval.
719	If Directory Maintenance window is opened on a node that has no directories configured in history or if all directories are deleted from that window, the builder will crash.
729	dbConfig crashed because a compaction ratio had decimals (like 0.0178) in it.

Table 4. Problems Fixed by History 2.4 Patch 10

ID	Description
738	When in the composite log view and the user selects File->Open , the dialog shows all the logs but the Filter Logs, Search Logs, and Refresh List buttons are all grayed out and disabled.
755	BDX incorrect permissions does not allow raw data export to be used for Data Reconciliation client applications or other client applications.
760	Fixed crash in hsServer when retrieving list of logs in a logs in log sets and second log set is empty.
761	If newly created composite log is the first composite log, it may fail to show up in the Open Composite Log dialog box after it has been saved.
765	dbConfig changes option does not reset next index when the logCapacity is modified. This can cause data corruption of the numeric logs when trying to increase the log capacity.
775	hsLogMan includes CCF/PHL when trying to resolve requests from MOD consoles. This can result in an 8 second time-out for each trace on a MOD console, delaying data returned for almost 2 minutes (12 traces * 8 =96 seconds). (BaseHistory, MOD 300 only).
779	Modify operations are not accepted by hsServer. Allow debug in hsPDLStorage.
780	Increased surface limit for Jukebox archive to the maximum supported number, 64.
792	Report requests that are issued at the end of Batch 300 batches are preventing PDL data from being stored and hence archived by the Enterprise Historian.
799	If archive fails to write out an automatically scheduled PDL, history server never reschedules the PDL to archive again. It will also not schedule any more automatic PDL archives. Once in this state, the only way to correct the situation is to restart History.
805	Diagnostic errors occur when modifying PDL task variables.

Table 4. Problems Fixed by History 2.4 Patch 10

ID	Description
819	The dcHistoryRestore script provided by history for the Master OSHS fails. This occurs because the -s option for hsBAR should not have been included in the script.
822	During an upgrade of History from 2.2/0 to 2.4/0, the UpgradeHistory220 script failed to convert a large table (750,000 entries). The temporary tablespace created for the table was not large enough. The fix is to have the system calculate the size of the temporary table needed before the conversion task is run, and build the table based on those results.

Table 5. Problems Fixed by History 2.4 Patch 9

ID	Description
429	When creating an Event log, you can specify which process sections to collect events from. This works only if you configure it correctly the first time. If you adjust the sections (i.e., go from ALL to just section 1), you still get the events for the original settings.
448	When the status of an object from which history is collecting changes to bad status, client is not aware that there is a problem because the last history value subscription updates only if the last value is good. History keeps the last known good value and ignores everything that is coming in.
455	It was possible for dbConfig to allow a configuration of a log hierarchy where the secondary logs were not collecting from a log with an access name different from the composite log access name.
463	When collecting remote event log across a gateway, the communication may fail, causing a time-out. The remote eventlog time out is 90 minutes. During this time, no other event requests are made, including to the local RTA board, thus no local events are collected during this time either.

Table 5. Problems Fixed by History 2.4 Patch 9

ID	Description
464	Deleted event logs will still stay active (until the Enterprise Historian is restarted) and write events to the Event Log table.
472	Instead of being directed to the screen, output of history utilities is erroneously directed to the log file.
473	The message quality time status bit (Uncertain) is not stored in the Event Log.
474	When the templet for a series of composite logs is deleted, the correct name is not picked to update the composite log typical.
486	dbDump would give a lot of warnings about attributes not being valid for the changes file when dumping logs with typicals, even though those attributes were not going to the changes file in the first place.

Table 6. Problems Fixed by History 2.4 Patch 8

ID	Description
90	Bulk Data Export does not produce an error file if no input file is specified.
243	Bulk Data Export treats future invalid data as valid data.
269	Data Forwarding of Distributed Log data can be disconnected and remain this way. Fixed by reconnecting to source node if no distributed messages are received after 4 hours.
387 & 389	Prevent crash or looping of hsCollection on Console node when source node for distributed logs sends a disconnect.
399	Prevent storage from hanging when distributed logs are more than 32768 values behind the source logs.
402	HP-UX consolidation node collecting distributed logs can receive an incorrect message length when Historian network node disconnects for any reason. This can cause the consolidation history server to restart or hang.

Table 6. Problems Fixed by History 2.4 Patch 8

ID	Description
407	Fixed dbConfig to correctly dump logs with templates where the template log is not the first one to be retrieved for a given template. Also modified the changes file to only contain attributes that are valid for the changes file to contain in the first place.
413	History software did not support the ability to subscribe to the last stored history value using the access name.
415	It is possible to put hscollection into an infinite while loop when deactivating more than one log in a single request (using Runtime Status, for example). For this infinite loop to occur, the logs being deactivated must have distributed logs from two different remote nodes currently active.
418	If an archive entry has more than 32,000 log entries, View Media window in History Builder will fail to display any of them. A temporary fix ups the limit to 64000 log entries by changing local variable type to unsigned.
419	PDL Maintenance option is an off line tool used to clean up PDL tables, applicable only to History 2.2 systems. Option was removed.
423	Correct problem using Create User Index functionality which does not allow the columns indexed to exceed 32 characters.
433	Bulk Data Export retrieval functions were moved into a shared library to improve code support.
435	The Reset Archive Groups window was enabled in the history builder. This supports manual archive recovery if the archive file becomes too large.
436	Bulk data export can now work with Raw data from asynchronous logs. This was required for Pavilion support.
444	Restoration of PDL logs will fail when total number of history associations exceeds 256.

Table 7. Problems Fixed by History 2.4 Patch 7

ID	Description
284	Each time a file open is done for composite logs, the History Builder reads all the names from the selected nodes and sorts them. The time to read them, especially from remote nodes, and time to sort them makes the History builder very difficult, if not impossible, to use in systems with more than 30,000 logs.
286	1. On the View Archive Device, the field called "state" refers to the same information that is called "Mode" on the Archive Device Window. 2. The "State" and "Active Volume" information is not in agreement with the "Mode" and "Active Volume" fields on the Archive Device Window. For example, on the View Archive Device, the State field indicated Vol-Change and the Active Volume field indicated volume # 20, while on the Archive Device Window the Mode indicated archiving and Active Volume field indicated Volume # 21.
287	On a station where there are ~90,000 logs, when you select View Log window and then select Retrieve by Location, the View Log and History Builder windows will crash.
288	While testing mo archive device configuration, the Active Volume was set to 21, the Volume field was set to 15, and the Volume field and Active Volume field turned red. The Volume Field was changed to 22 and the Active volume showed 1 instead of being set back to 21, which was the original active volume.
353	Due to the 20 character limitation in Master OMF name translations, the names used by the History Builder to create/view history configurations will become unusable when the history name exceeds 20 chars. This occurs when the network address exceeds 5 characters.
359	hsDBMaint -report -f was an option that fixed a specific problem with History flat files in the initial release, History2.1. Instead of removing the option, this option will now erroneously perform the equivalent of hsDBMaint -restore -f on each log in difficultly, as reported by hsDBMaint -report. This effectively re-initializes the log, deleting all the data in the log.

Table 7. Problems Fixed by History 2.4 Patch 7

ID	Description
366	Several issues were found with log typicals: 1. When "hsDBMaint -clean" is run, and because of an error it cleans up a composite log that was a template for a typical, the typical would not be changed to reference a different log. Consequently, any database dump done using dbConfig would have an invalid configuration because all like statements would have an empty log name for the template log. 2. A related issue of log typicals was found in the History Builder. When the builder deletes a distributed log that is used as a template, the typical is never changed to reference a different valid log, and the same problem with the database dump files occurs.
367	When archive fills up a volume, it starts searching for the next volume where it is going to write. If the Jukebox has 16 disks(32 volumes) and if all of them are full, archive will mount each one of those 32 individual volumes before choosing the one with the oldest last archive time and re initializing it. This process may take up to 43 minutes. During this time plus the time it takes to actually write data to disk, once the volume is chosen, archive is unusable since no one can view media or restore logs with that device.
368	When customers chose to upgrade from IMS2.0 to EH2.2 using an hsBAR tape, the UpgradeHistory220 script could fail in a way that would prevent the upgrade from working without support from Technical Support. In this particular case, orphan records were not removed before the hsBAR was created at History2.2. However, for customers that have done this, the upgrade could fail because of table space, temp or rollback problems. The real problem is that hsConvertDBto240 adds columns to a PDL table before it is converted to History2.3 format. This prevents the hsConvertDBto230 from ever being able to convert the system with tech support help. The problem can be avoided by checking that the tables are at History2.3 before converting to History2.4.
370	Changing individual deadband compaction or engineering range attributes has no effect on the collection until history is restarted. However, if all three attributes are changed by the builder, collection take place immediately.

Table 8. Problems Fixed by History 2.4 Patch 7 (BaseHistory):

ID	Description
162	The dcALM process returns more values than requested and the values can be outside the requested time range. This functionality conflicts with the functionality provided by the History Interface.
352	When dual logs are configured in history, the LogManager is expected to use the node that is up longer to satisfy a numeric data request. The function that provides the boot time of the history server was returning January 1970. This caused all the logs to be treated equally, and the lowest sequenced number log (or local) would be chosen over a log that could return all the data for the period requested.
360	Originally, hsLogMan was supposed to limit cyclic times for PHL data to be 6 seconds or faster, even for faster PHL storage rates. In some cases, this is not enforced and hsLogMan can set up subscriptions at the PHL storage rate. The rates faster than 6 seconds can substantially load down the controller.

Table 9. Problems Fixed by History 2.4 Patch 6

ID	Description
173	With history builder, a composite log consisting of two logs was built; Cut Log was used to cut a secondary numeric log and create another secondary log which received the sequence number 3; the database was dumped using dbConfig. The database file failed to load because it was looking for log sequence 2, the secondary log that was cut.
214	hsDBMaint -clean function can corrupt a History DB if many logs need cleaning. Proper operation of this function will be needed for customers when they are configuring a consolidation Enterprise Historian node. Without a GUI for deleting many logs, the only painless method is to delete the Composite Logs that you want to delete from the object_table and running the hsDBMaint -clean command to clean up the other configuration references and the flat files for the logs being deleted. Currently, clean can delete wrong objects when run with many (more then several) logs that have been deleted from the object_Table.

Table 9. Problems Fixed by History 2.4 Patch 6

ID	Description
249	Dropping/Recreating the Oracle Hist DB takes 3 to 5 minutes. This is a long time to wait to find out that you had a typo on your command line.
283	Collection and Storage can deadlock on control network node when a consolidation node is catching up for a significant amount of time. Significant means that each log must catch up 9600 values or more. The threshold for the problem may be lower.
304	When moving the mount point with hsBAR, the move fails if the last directory(s) are empty. Additionally, if the restore is from file, the file must be in the same location it was created for the restore to work.
324	The time checking is too narrow for determining when logs are in difficultly for distributed logs. This generates diagnostics when they should not be.
338	When using like statements that specify the log set to be used, dbConfig does not report that the logSet specified is not valid when a log set with the same name does not exist in a DB file.

Table 10. Problems Fixed by History 2.4 Patch 5

ID	Description
263	The LogManager was not calculating the correct number of values to return. This resulted in trend displays receiving more values than they could display. This results in the trace not filling the entire scope of the trend.
275	History requests from DataDirect History Values and sql to Numlogval may get directed to the CCF Trend Buffer (if it exists) where it will fail because the trend buffer doesn't support interpolation.
339	The new HSGetDefaultScope interface was preventing any information from being cached by the logManager (to make subsequent call-ups faster). This fix also requires the OS group trend element to be corrected.

Introduction Section 3 Installation

Section 3 Installation

Introduction

Please review all the instructions, and your ABB Support terms and conditions, for precautions, scope of license, restrictions, and limitation of liability and warranties, before installing this software.



In case of difficulties, please contact the Technical Support Group via SUPPORTLINE:

in the U.S. - (1-800-HELP-365); International - (1-614-224-5888).

History Version 2.4/0 Patch 13 is not removable. It is only being released as a patch revision because oracle tables are changing, and the changes cannot be removed. Therefore, customers should back up their systems before installing this patch update.

This patch can be applied to systems with Enterprise Historian version 2.2, or OS1.8/nPm. The History Services software on the Enterprise Historian or Operator Station platform must be at Version 2.4 to install this patch. Refer to the applicable update procedure based on the platform where you are installing the patch:

Updating the Enterprise Historian Version 2.2 Platform

Backing Up Your System

It is strongly recommended that you perform a full backup of your system and application data before installing any new software. For information on backing up your station, please refer to the *Enterprise Historian for HP-UX Version 2.2 Administrator's Guide*.



The following procedures must be performed when you are installing the patch from CD-ROM:

- Adding /cdrom with sam on page 21
- Preparing the CD-ROM for Installation on page 22

These procedures prepare the CD-ROM reader to load the patch to the local station.

If you received the software depot by some other means, disregard these two procedures and go directly to Instructions for Station(s) to be Updated on page 22.

Adding /cdrom with sam

If you are installing from CD-ROM, the /cdrom directory must exist before adding this patch to the system. Check to see if the /cdrom directory exists by entering ls / and looking for the /cdrom directory name. If it does not already exist, follow the instructions below for adding the /cdrom directory with sam. If it does exist, skip these instructions and continue on to Preparing the CD-ROM for Installation below.

To add the /cdrom directory:

- 1. In an HP terminal window, log on as the root user by entering: su root
- 2. Enter sam
- 3. Within SAM Areas window, select Disks and File Systems
- 4. Within SAM Areas: Disks and File Systems window, select **Disk Devices**
- 5. Within Disk Devices window, select **CD** from SCSI list of devices
- 6. Under Actions, Select 'Add' -> Not Using the Logical Volume Manager
- 7. Within 'Add CD_ROM Disk' window, enter /cdrom as Mount Directory:
- 8. In 'When to mount' area, deselect 'Now'. Leave 'At every system boot' selected.
- 9. Click **OK**.
- 10. File -> **Exit**
- 11. File -> **Exit SAM**.

Preparing the CD-ROM for Installation

If you are installing from CD-ROM, the /cdrom filesystem must be mounted before adding this patch to the system. To see if it is mounted, enter **bdf** at the UNIX prompt, and look for information about the /cdrom filesystem in the command output. If the filesystem is not mounted, follow the instructions below to mount it. If it is mounted, skip this section and proceed to Instructions for Station(s) to be Updated below.

- 1. In an HP terminal window, log on as the root user
- 2. Insert the Patch ABB-PHSU_240013 CD-ROM into the CD-ROM drive
- 3. Enter mount /cdrom



If the mount fails with the following message:

mount: /cdrom was either ignored or not found at /etc/fstab, follow the instructions in Adding /cdrom with sam on page 21.

4. Enter: swreg -1 depot /cdrom

This command only needs to be entered one time before loading the first station.

Instructions for Station(s) to be Updated

Before installing, you will need to stop all software on the Station (including Enterprise Historian software):

1. Open a terminal window and log in as the root user.

Enter **su root** (super user).

2. Enter /opt/advant/Startup/bin/IMSstop -v



If the Station with Enterprise Historian software is shut down in an uncontrolled way, the relational database may crash and the data may become corrupt. If the station has to be rebooted, use the HP-UX shutdown command. This command executes the IMSstop script.

3. If you are loading from a ".depot" file, go to Step 4.

If you are loading from CD-ROM, insert the Patch ABB-PHSU_240013 CD-ROM into the CD-ROM drive, then

a. Load the patch by entering:

/usr/sbin/swinstall -s <hostname>:/cdrom



<hostname> is hostname or IP address of Advant Station with CD-ROM drive attached.

- b. Go to Step 6.
- 4. Put the file you have received (ABB-PHSU_240013.depot) on the Enterprise Historian, for example under the /tmp directory.
- 5. Enter:

/usr/sbin/swinstall -s /tmp/ABB-PHSU_240013.depot

This brings up the "SD Install - Software Selection (station)" window.



If you get an error dialog indicating that "The current session cannot be saved.... Make sure that the HOME Environment variable is set", click OK to continue. This error may occur that this point, or later in the process.

6. Under the **Actions** menu select **Match what Target Has**.

This will select the proper licensed options on your system to update (including History, and/or PDL and/or SPC).



Ignore errors regarding fileset dependencies. Exit the dialog to continue the installation.

- 7. Under the **Actions** menu select **Install** (**Analysis**).
- 8. After analysis is complete, select the **Logfile** button to bring up the swagent.log file.

Search for the correct date and time heading. Check for any messages that begin with ERROR or WARNING. When satisfied, select **OK** to exit the log file.

- 9. Select **OK**, then **Yes** to begin the installation.
- 10. When the installation has completed, again select the **Logfile** button to bring up the swagent.log file in the window.

Search for the correct date and time heading. Check for any messages that begin with ERROR or WARNING. When satisfied, select **OK** to exit the log file.

Select **DONE** to finish the installation.

- 11. Under the **File** menu select **Exit** to end the swinstall process.
- 12. If you are loading from CD-ROM, remove the CD from the drive.
- 13. Execute the **swlist** command in an HP terminal window to view the History version. Verify the version is 02.04.00.13, Figure 1.

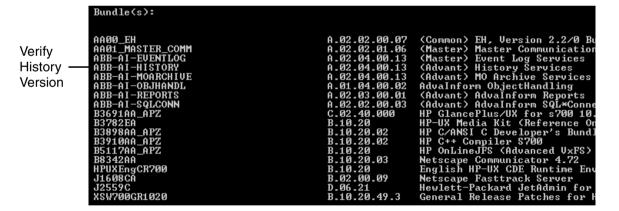


Figure 1. Verifying the History Version

- 14. As root user restart IMS processes. Enter: /opt/advant/Startup/bin/IMSstart
- 15. Perform the post installation procedures as described in Post Installation on page 25.

Section 3 Installation Post Installation

Post Installation

Log File Update

Whenever a patch is installed on a system, you should edit the Text File user_update.log found in the /var/adm/sw directory. At the end of the file, add "History Version 2.4/0 Patch 13 Installed", the date, and description if desired. Any other changes made to the product, such as custom memory pool changes may also be added.

The file should be created if it does not exist. You may make the file name more application specific, such as **user_update_EH2.2-0.log**, and rename the file at each software update step along the way.

The purpose of the text file is to prevent the deletion of certain user critical changes during a reloading or updating of a machine.

For Master Systems with Event Logs Configured

Run a conversion program to correct event entries that were stored incorrectly:

- 1. Before you run the conversion program, stop IMS processes if not already stopped. As root user, enter:
 - /opt/advant/Startup/bin/IMSstop -v
- 2. As ocsmgr user, enter: \$HS_HOME/bin/hsConvertDBto240 -f
- As root user restart IMS processes. Enter: /opt/advant/Startup/bin/IMSstart
- 4. Reboot any OS or Enterprise Historian nodes that view History data from this node.

Updating the Operator Station 1.8/n Platform

Backup

You should backup your Operator Station before upgrading. If necessary, you can use this backup to restore your data. For information on backing up and restoring your OS, please refer to the *Advant® Station 500 Series with AdvaCommand 1.8/1 AdvaBuild 2.9/0 P2 User's Guide*.



The following procedures must be performed when you are installing the patch from CD-ROM:

- Adding /SD_CDROM with sam on page 26
- Preparing the CD-ROM or DVD-ROM for Installation on page 27

These procedures prepare the CD-ROM reader to load the patch to the local station.

If you received the software depot by some other means, disregard these two procedures and go directly to Instructions for Station(s) to be Updated on page 22.

Adding /SD_CDROM with sam

These instructions must be performed to prepare the CD-ROM or DVD-ROM reader to load the software to the local station or remote stations. These instructions need only be performed one time before loading one or more stations.

The $/ \mbox{SD_CDROM}$ directory must exist before adding this update CD-ROM to the system.

Check to see if the /SD_CDROM directory exists by entering **ls** / and looking for it. If it does not already exist, follow the instructions below for adding the /SD_CDROM directory with sam. If it does exist, skip these instructions and continue on to Section, Installation.

These instructions must be performed to add the $\slash\hspace{-0.5em}\mathsf{JSD_CDROM}$ directory.

- 1. In an HP terminal window, log on as the root user.
- 2. Enter sam

- 3. Within SAM Areas window, select Disks and File Systems
- 4. Within SAM Areas: Disks and File Systems window, select Disk Devices
- 5. Within Disk Devices window, select CD from SCSI list of devices
- 6. Under menu item Actions, Select 'Add' -> Not Using the Logical Volume Manager
- 7. Within 'Add CD_ROM Disk' window, enter /SD_CDROM as Mount Directory:
- 8. In 'When to mount' area, deselect 'Now'. Leave 'At every system boot' selected.
- 9. Click OK.
- 10. File -> Exit
- 11. File -> Exit SAM.

Preparing the CD-ROM or DVD-ROM for Installation

- 1. In an HP terminal window, log on as the root user
- 2. Insert the Patch ABB-PHSU_240013 CD-ROM into the drive
- 3. Enter mount /SD CDROM
- 4. Enter: /SD CDROM/upgrade/register depot

This command only needs to be entered one time before loading the first station. It registers the directories containing the software to be loaded.

Instructions for Station(s) to be Updated

These instructions must be performed on each station that is to have the update installed.

- 1. If the station you are updating is an X-terminal host, do step a through step d before you go to step 2. If the station you are updating is not an X-terminal host, go directly to step 2.
 - a. You need to stop the AdvaCommand software at every X-terminal connected to the host. Therefore, at each X-terminal running

AdvaCommand remotely from the host, press **Ctrl-D**> and enter **stopsession** in the command field.

- b. On the X-terminal host station press **<Ctrl-D>** and enter **quit** in the command field.
- c. Suspend the AdvaCommand Auto Startup Interface by clicking on the **Suspend** button.
- d. On the X-terminal host, open an HP terminal window.
- 2. In an hpterm window, Log on as root (super user).
- 3. Shutdown the Advant Station and X server by entering:

/sbin/init.d/advaCommand stop

This shuts down the Operator Station completely, and after a few seconds the X server will shut down.



If a USB keyboard is directly connected to a PCI RTAB with USB port, a PS2 keyboard MUST be connected to proceed.

- 4. Once the X server is stopped you may have to press the **Enter>** key to see the login prompt.
- 5. Log on as root (super user).
- 6. If you are loading from a ".depot" file, go to Step 7.

If you are loading from CD-ROM, insert the Patch ABB-PHSU_240013 CD-ROM into the CD-ROM drive, then

a. Load the patch by entering:

/usr/sbin/swinstall -s <hostname>:/SD cdrom



<hostname> is hostname or IP address of Advant Station with CD-ROM drive attached

b. Go to Step 10.

- Ensure that all volumes in /etc/fstab are mounted. To do this, compare the
 contents of the fstab file with the output of the bdf command. Comment out any
 volumes that are not mounted.
- 8. Put the file you have received (ABB-PHSU_240013.depot) on the station where you are installing the patch, for example under the /tmp directory.
- 9. Enter:

/usr/sbin/swinstall -s /tmp/ABB-PHSU_240013.depot

This brings up the "SD Install - Software Selection (station)" window.



If you get an error dialog indicating that "The current session cannot be saved.... Make sure that the HOME Environment variable is set", click OK to continue. This error may occur that this point, or later in the process.

10. Under the **Actions** menu select **Match what Target Has**.

This will select the proper licensed options on your system to update (including History, and/or PDL and/or SPC).



Ignore errors regarding fileset dependencies. Exit the dialog to continue the installation.

- 11. Under the **Actions** menu select **Install** (**Analysis**).
- 12. After analysis is complete, select the **Logfile** button to bring up the swagent.log file.

Search for the correct date and time heading. Check for any messages that begin with ERROR or WARNING. When satisfied, select **OK** to exit the log file.

- 13. Select **OK**, then **Yes** to begin the installation.
- 14. When the installation has completed, again select the **Logfile** button to bring up the swagent.log file in the window.

Search for the correct date and time heading. Check for messages that begin with ERROR or WARNING. When satisfied, select **OK** to exit the log file.

Select **DONE** to finish the installation.

- 15. Under the **File** menu select **Exit** to end the swinstall process.
- 16. If you are loading from CD-ROM, remove the CD from the drive.
- 17. Execute the **swlist** command in an HP terminal window to view the History version. Verify the version is 02.04.00.13, Figure 2.

Figure 2. Verifying the History Version

18. Enter the reboot command:

reboot

- 19. At the Operator Station Startup Interface window, open HP terminal windows as required to complete Finishing Instructions on page 30. Exit all HP terminal windows when done.
- 20. Follow the start-up procedures as described in *Advant Station 500 Series with AdvaCommand 1.8/1 / AdvaBuild 2.9/0 P2 User's Guide.*

Finishing Instructions

These instructions must be performed to remove the CD-ROM from the reader after loading the upgrade to the local station or remote stations.

- 1. In an HP terminal window, log on as the root user
- 2. Enter umount /SD_CDROM
- 3. Remove CD-ROM from the reader.

Log File Update and Review

Whenever an upgrade is installed on a system, you should check for ERROR in the following text files. Further checks can be reviewed the **swinstall.log** and **swagent.log**.

Optional User Log

At the end of the **user_update.log** file, add the upgrade names that you have installed, the date, and description if desired. Any other changes made to the product, such as custom memory pool changes may also be added.

The file should be created it if it does not exist. You may make the file name more application specific, such as **user_update_os1.8-1.log**, and rename the file at each software update step along the way.

The purpose of the text file is to prevent the deletion of certain user critical changes during a reloading or updating of a machine.