

Adeptia Suite Log Cleanup and Archival Guide

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Adeptia Support Information

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PREFACE

This guide provides a brief description about the Adeptia Suite log cleanup and archival process. This document also covers how configure the log cleanup and archival.

Target Audience

This document is intended for the Administrators, who want to configure the log cleanup and archival.

Pre-requisites

You must have administrative rights within Adeptia Suite configure different properties of log cleanup and archival.

CONVENTIONS

The following tables list the various conventions used in Adeptia documentation. We follow these conventions to help you quickly and easily identify particular elements, processes, and names that occur frequently in documents.

Typographical conventions

This guide uses the following typographical conventions:

Convention	Description
Bold text	Indicates one of the following: Screen element New terminology A file or folder name A control in an application's user interface A registry key Important information
Italic text	Indicates a reference or the title of a publication.
Monospaced text	Indicates code examples or system messages.
Monospaced bold text	Indicates system commands that you enter.
Hyperlink	Indicates an Internet link to target material.

Graphical conventions

This guide uses the following graphical conventions:

Convention	Description
0	Indicates additional information that may be of interest to the reader.

CONTACTS/REPORTING PROBLEMS

These sections present contact information for a variety of situations.

Sales

In case of any sales queries, please contact us at *sales@adeptia.com*. **Support**

For support queries, please contact us at *support@adeptia.com*.

Latest updates and information

For the latest updates and information, please visit us at *www.adeptia.com*.

Adeptia Web site

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INTRODUCTION

Adeptia Suite keeps all the design time and runtime information in log database tables. These logs are used for monitoring different logs such as Process Flow logs, Event logs, System logs and Audit trail logs etc. These logs help you in debugging and troubleshooting of any problem caused in the Adeptia Suite. Also when process flows are executed, each process flow creates temporary files to store intermediate data called repository files. For each instance of the Process flow execution, a unique repository folder is created that contains Source, intermediate XML data files, and target formatted data. By default repository files are being stored in the **../../AdeptiaServer-x.x/ServerKernel/web/repository** folder. Apart from that Adeptia also writes Kernel and WebRunner application logs within files.

These logs and data can cause issues if they accumulate over a long period of time. Adeptia Suite has Cleanup task that is scheduled to run at a specified time to cleanup logs and temporary repository files older than a specified number of days.

This document covers:

- How Log and Repository Cleanup works
- How Application Logs Cleanup works
- How Archival of Logs and Repository works
- How Archival Log Cleanup Works
- How Re-scheduling of Cleanup Works

HOW LOG AND REPOSITORY CLEANUP WORKS

By default, log and repository cleanup is *enabled* and runs automatically at 8:00 P.M. daily. It deletes all the logs and repository files that are older than 5 days. This section describes how you can configure the cleanup schedule and retain time.

Steps to configure the cleanup schedule

- 1. Click the **Administer** tab and then click on the **Setup** menu. This action will display you all the options of the **Setup** menu.
- 2. Select the Application Settings menu option. This action will display you the Application Settings screen.
- 3. From the Application Settings screen, click on the Update System Properties. This action will display you the Update System Properties screen (see Figure 1).

S	etup > Application Settings
-	Setup > Application Settings > Update System Properties
	 Load Management WebSphere Settings Kernel Settings Embedded Database Settings Performance Optimization Process Flow Services Systems Maintenance Web Server Applet Configuration Solution Properties

Figure 1: Update System Properties

4. Expand the *Maintenance* properties parent node and then further expand the *Log Cleanup Properties* child node (see Figure 2).

Home	Develop M	Monitor Administer
Setup • Maintenance	 Security - Syster 	m Dashboard
Setup > Applicatio	n Settings	
 Process Flow Services Systems Maintenance Data C Log Cl 	, Cleanup Properties Jeanup Properties	
	Property Name Value Description Note :- To activate this p	abpm.appmanagement.logCleanupCronExpression 0 0 20 * * ? Log Cleanup CronExpression property after any change, you need to Restart Server.
	Property Name Value Description Note :- To activate this p	abpm.appmanagement.retainTime Data Cleanup Retain Time property after any change, you need to Restart Server.
	Property Name Value Description Note :- To activate this p	abpm.appmanagement.logCleanupPropertiesFile log-cleanup.properties Log Cleanup Properties File property after any change, you need to Restart Server.
 Archiv Sched 	e Cleanup Properties ule Tasks	

Figure 2: Update System Properties (Log Cleanup Properties)

5. Change the value of the properties as per your need. For your reference, Table 1 shows the list the properties along with their descriptions.

Table 1: Log	Cleanup	Properties
--------------	---------	------------

Property Name	Description
abpm.appmanagement.logCleanupCronExpression	Define the time in cron expression, when you want to run the log and repository cleanup. For example for 8 PM you need to define 0020 **?. To know details about cron expression, refer to <u>Appedix A:</u> <u>Cron Expression</u> section.
abpm.appmanagement.retainTime	This property is used to define the retain time for repository files. It is recommended to leave this property blank. When this property is blank, the retain time, which is defined for logs within log- cleanup.properties file, is used as retain time for data also.
abpm.appmanagement.logCleanupPropertiesFile	Define the path of log-cleanup. properties file. Log- cleanup.properties file contains the retain information about different log tables. By default this file is located in <i>//AdeptiaServer-</i> <i>x.x/ServerKernel/etc/</i> folder. It is recommended not to change the value of this property. Refer

Property Name	Description
	Table 2 for details of log-cleanup.proeperties file.

- 6. Click the **Save** button to save your settings.
- 7. To change the retain time for various logs, go to ../../AdeptiaServer-x.x/ServerKernel/etc/log-cleanup.properties file and change the retain time of the property associated to that particular log. For your reference, Table 2 shows the list of retain-time property of various logs within the log-cleanup.properties file.

Property Name	Logs
abpm.AU_LOG.logRetainTime	System Logs, Audit Trail Logs and Process Flow Logs
abpm.AU_TRANSACTIONDATA.logRetainTime	Process Flow Logs
abpm.AU_EVENTLOG.logRetainTime	Event Logs
abpm.AU_TASKLOGS.logRetainTime	Task History
abpm.AU_PROCESSVARIABLETRACKER.logRetainTime	Solution Dashboard
abpm.AU_TRANSACTIONLOG.logRetainTime	Process flow logs
abpm.EDI.logRetainTime	B2Bi logs

Table 2: Retain Time Properties Within Log-Cleanup.Properties File

- We strongly recommend that you should not change any property other than the retain time properties.
- We recommend you to define same retain time for different logs to maintain the consistency within all logs. However you can define different retain time for different logs.
- Log Cleanup does not delete logs of those process flows that are in the running/waiting state. This means that, if a process flow is in the running/waiting state for more days than the days specified in the retain time properties of logs then, the Log Cleanup will not delete the logs of that particular process flow.
- 8. Save the file and restart the Kernel and WebRunner.



HOW APPLICATION LOGS CLEANUP WORKS

Adeptia Suite maintains the logs of Kernel and WebRunner within the **KernelaApplication.log** and **Webrunnerapplication.log** files respectively. These files are stored within the *../../AdeptiaServer-x.x/ServerKernel/logs/applicationlogs* folder. Once any of these log files reaches the specified maximum size then, the Adeptia Suite renames the log file by appending it with a date-time stamp and creates a new file by the original name. By default, the maximum size specified for these files is 20 MB.

These logs file can cause issues if they accumulate over a long period of time. Adeptia Suite has Cleanup task that is scheduled to run at a specified time to cleanup these files which are older than a specified number of days. By default this cleanup runs at 8:00 PM daily and deletes the log files, which are older than 5 days. This section describes the steps to configure the cleanup schedule and retain time.

Steps to configure the cleanup schedule

- 1. Click the **Administer** tab and then click the **Setup** menu. This action will display you all the options of the **Setup** menu.
- 2. Select the Application Settings menu option. This action will display you the Application Settings screen.
- 3. From the Application Settings screen, click on the Update System Properties. This action will display you the Update System Properties screen.
- 4. Expand the *Maintenance* properties parent node and then further expand the *Data Cleanup Properties* child node (see Figure 3).



Figure 3: Update System Properties (Data Cleanup Properties)

5. Change the value of the properties as per your need. For your reference, Table 3 shows the list the properties along with their descriptions.

Property Name	Description
abpm.appmanagement.cleanupCronExpression	Define the time in cron expression, when you want to run the cleanup. For example for 8 PM you need to define 0 0 20 * * ? . To know details about cron expression, refer to <u>Appedix A: Cron</u> <u>Expression</u> section.
abpm.appmanagement.retainTime	This property is used to define the retain time for log files. By default 5 days is set. You can change the value as per your need.

Table 3: Data Cleanup Properties

6. Click the **Save** button and restart the Kernel and WebRunner.

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HOW ARCHIVAL OF LOGS AND REPOSITORY WORKS

When log cleanup runs, it deletes logs and the repository files, which are eligible for the cleanup. You may want to archive these logs and repository files before they get cleaned up. This section describes how you can enable archival of log and repository files.

You can archive the logs:

- On a different database which should be on a different database server.
- On the same database which is being used for main log tables.

It is always recommended that you should use a different database setup on a different database server for archival of logs.

This section covers:

- How To Enable Archival
- Creating Log Archival Tables on Different Database

HOW TO ENABLE ARCHIVAL

To enable the archival you need to configure some properties. This section describes, how to configure these properties.

Steps to enable Archival

- 1. Click the **Administer** tab and then click the **Setup** menu. This action will display you all the options of the **Setup** menu.
- 2. Select the Application Settings menu option. This action will display you the Application Settings screen.
- 3. From the Application Settings screen, click on the Update System Properties. This action will display you the Update System Properties screen.
- 4. Expand the *Maintenance* properties parent node and then further expand the *Archival Properties* child node (see Figure 4).

Hor	ne	Develop	Monitor	Administer
Setup 🔹 🛛 Mai	ntenance 🕶	Security •	System Dashboard	
Setup > Ap	plication	Settings		
 Load Kern Perfi Proc 	I Managen el Settings ormance C ess Flow Recover Archival	nent 5 Optimization Y		
	F	Property Name /alue Description lote :- To activat	e abpm.tra web/Arc Transact te this property after	ransaction.repository.archive.path rchive/ProcessFlow ztion Repository Path r any change, you need to Restart Server.
	F	Property Name /alue Description Note :- To activat	e abpm.cr yes Option to te this property after	reate.repository.archive.path to create Repository Archive Path in case it does not already exist r any change, you need to Restart Server.
	F	Property Name /alue Description lote :- To activat	e abpm.log no Option to te this property after	ogs.archival.enable to enable/disable archive logs r any change, you need to Restart Server.
	F	Property Name /alue Description	abpm.log	ogs.archival.database

Figure 4: Update System Properties (Archival Properties)

5. Change the value of the properties as per your need. For your reference, the tables below show you a list the properties along with their descriptions.

abpm.transaction.repository.archive.path

Description	Directory path to archive Process Flow repository files before they gets cleaned up.
Default Value	web/Archive/ProcessFlow
Possible Values	Any absolute path or relative path where you want to archive the Process flow repository files before they gets cleaned up.
Selection Criteria	This property specifies the folder, where to you want to archive the process flow repository files if the archival of Process flow log and Data is enabled. You can enable the Archival using <i>abpm.data.archival.enable</i> property. By default, Process flow repository files are archived in the <i>ServerKernel/web/Archive/ProcessFlow</i> folder. You can define any absolute path or any relative path where you want to archive the repository files. For Example: <i>C:\Adeptia_ArchiveRepository</i> The relative path shall be relative to ServerKernel folder. For Example: To store the repository files within /ServerKernel/Adeptia_ArchiveRepository, you can define the path as : ./Adeptia_ArchiveRepository

abpm.create.repository.archive.path

Description	Specifies whether to create the archive folder or not, if it doesn't exists.
Default Value	Yes
Possible Values	Yes/No
Selection Criteria	Using this property you can choose, whether to create the archive folder, which is specified in the <i>abpm.transaction.repository.archive.path</i> property, or not, if the folder already doesn't exists.

abpm.logs.archival.enable

Description	Option to enable or disable Archival of Process flow log	
Default Value	Νο	
Possible Values	Yes/No	
Selection Criteria	Set this property to Yes , if you want to archive the process flow logs before they are cleaned up by cleanup process. If you set this property to <i>no</i> , then the logs are not archived before cleanup.	

abpm.logs.archival.database

Description	Specifies whether to archive the logs on the same database, which is used to store the logs, or to use another database.	
Default Value	1	
Possible Values	1/2	
Selection Criteria	Set this property to 1, if you want to archive the logs in the same database, where the logs are being stored. In this case, for every log table, an archive table is created in the log database and logs are archived in these tables. Set this property to 2, if you want to archive the logs in different database. It is recommended to use the different database to archive the logs because archive the logs on the same database may affect the performance. In case you have set this property to 2, you need to create a new database and the	

Description	Specifies whether to archive the logs on the same database, which is used to store the logs, or to use another database.	
	replica of the log tables within that database. To know how to create log archival tables, refer the <u>Creating log archival tables on different database</u> <u>server</u> section.	
	To enable the Adeptia Suite to connect to the Log Archival database that is on a different database server you need to specify the Log Archival Database Configuration properties. To know how to specify these properties, refer to <u>Appendix C: Log Archival Database Configuration</u> section.	

abpm.logs.archival.batch.enable

Description	Specifies whether to archive the logs <i>record by record</i> or in <i>batch</i> .	
Default Value	No	
Possible Values	Yes/No	
Selection Criteria	If the values is No , records are archived one by one.	
	If the value is Yes , the records are archived in batches.	
	It is recommended that you should archive records in batches to avoid any performance related issue.	

abpm.logs.archival.batch.size

Description	Specifies the number of records to be archived in one batch.	
Default Value	1000	
Possible Values	Any positive integer, which can be easily supported by the archival database.	
Selection Criteria	Its value specifies the number of records, which are archived in one batch, when abpm.logs.archival.batch.enable property is set to Yes .	

abpm.logs.deleteData.onArchivalFailure

Description	Specifies whether to delete the records from log table, in case any error occurred in archival, or not

Description	Specifies whether to delete the records from log table, in case any error occurred in archival, or not
Default Value	No
Possible Values	Yes/No
Selection Criteria	If the value is No , then records from main log tables are not deleted when there is any error during archival.
	If the value is Yes , then records from main log tables are deleted, even if there is any error during archival.
	It is recommended to keep this property as No .

abpm. logs. send Notification. on Archival Failure

Description	Specifies whether to send the mail, in case of any error during log archival, or not
Default Value	Yes
Possible Values	Yes /no
Selection Criteria	If the value is no, then no mail notification is sent in case of any error during log archival.
	If the value is yes, then mail notification is sent to email address configured in admin user, in case of any error during log archival. If this property is set to yes, then make sure that the <u>Mail Server Parameter</u> properties are configured properly.

abpm.data.archival.enable

Description	Option to set process flow repository archival enable or disabled.	
Default Value	Νο	
Possible Values	Yes /No	
Selection Criteria	Set this property to Yes , if you want to archive the process flow repositories before they are cleaned up by cleanup process. If you set this property to No , then the repositories are not archived before cleanup.	

6. Click the **Save** button and restart the Kernel and WebRunner.

CREATING LOG ARCHIVAL TABLES ON DIFFERENT DATABASE SERVER

In case you are using Adeptia Suite to process large number of files every day, we recommend you to use separate database server for log archiving. Following are the additional steps that you need to follow in order to create log archival tables on separate database.



If you have already created the log archival tables on different database, you can skip the following steps.

Steps to configure Log Archival tables on different database server:

- 1. Create a database (e.g. Adeptia_Logs_Archive on a SQL Server) on the database server, where you want to archive the logs.
- On this database, run the initialize-log-<database server name>.sql script located in the

 ././AdeptiaServer-x.x/ServerKernel/etc folder. This creates the tables where the archive logs will be
 stored (e.g. for a database created on the SQL server run initialize-log-sqlserver.sql script and for a
 database created on an Oracle Server run initialize-log-oracle.sql).
- Now you have to run the create-indexes-<database server name>.sql script located in the
 .././AdeptiaServer-x.x/ServerKernel/etc folder. This applies the indexes on the tables created in
 previous step (e.g. for a database created on the SQL server run create-indexes-sqlserver.sql script and for
 a database created on an Oracle Server run create-indexes-oracle.sql script).
- 4. Make sure to set the value of abpm.logs.archival.database as 2. Please refer to the <u>abpm.logs.archival.database</u> table for more details.



HOW ARCHIVAL LOG CLEANUP WORKS

Adeptia Suite maintains the archival of various log files on a separate server. These archival logs file can cause issues if they accumulate over a long period of time. Adeptia Suite has an archival log cleanup task that you can schedule to run at a specific time to clean up the archived files which are older than a specified number of days. By default, cleanup of archival logs happens after 30 days. It deletes all the logs and repository files that are older than 30 days. However, you can always configure the duration in the **archiveLog-cleanup.properties** file. This section describes you the steps to configure the archival logs cleanup.

Steps to configure the archive cleanup schedule

- 1. Click the **Administer** tab and then click the **Setup** menu. This action will display you all the options of the **Setup** menu.
- 2. Select the **Application Settings** menu option. This action will display you the **Application Settings** screen.
- 3. From the Application Settings screen, click on the Update System Properties. This action will display you the Update System Properties screen.
- 4. Expand the *Maintenance* properties parent node and then further expand the *Archive Cleanup Properties* child node (see Figure 5).

Setup > Application Settings				
	Load Manag Kernel Settir Performance Process Flov Services Systems Maintenance Data (Data (Archiv	ement gs Optimization / Cleanup Properties leanup Properties re Cleanup Properties	;	
		Property Name	abpm.appmanagement.archiveLogCleanupCronExpression	
		Value]
		Description	Archive Log Cleanup CronExpression	
	Note :- To activate this property after any change, you need to Restart Server.			
		Property Name	abpm.appmanagement.archiveLogCleanupPropertiesFile	
		Value	archiveLog-cleanup.properties]
		Description	Archive Log Cleanup Properties File	
		Note :- To activate this	property after any change, you need to Restart Server.	

Figure 5: Update System Properties (Archive Cleanup Properties)

5. Change the value of the properties as per your need. For your reference, Table 4 shows the list the properties along with their descriptions.

Property Name	Description
abpm.appmanagement.archiveLogCleanupCronExpression	Define the time in cron expression, when you want to run the archive log cleanup. For example for 8 PM you need to define 0 0 20 * * ? . To know details about cron expression, refer to <u>Appedix A: Cron</u> <u>Expression</u> section.
abpm.appmanagement.archiveLogCleanupPropertiesFile	Define the name of archive log cleanup. properties file. archiveLog- cleanup.properties file contains the retain information about different log tables. By default this file is located in <i>//AdeptiaServer-x.x/ServerKernel/etc/</i> folder. We recommend that you do not change the value of this property.

- 6. Click the **Save** button and restart the Kernel and WebRunner.
- 7. To change the properties of **archiveLog-cleanup.properties** file, go to **../../AdeptiaServer-x.x/ServerKernel/etc/ archiveLog-cleanup.properties** file and change the properties as per your requirements. For your reference, Table 5 shows the list of retain-time property of various logs within the **log-cleanup.properties** file.

Property Name	Logs
abpm.archive.logRetainTime	This property defines the retain time for archive log. If you do not specify a value for it then, it takes the default retain time of 30 days.
abpm.archive.dataRetainTime	This property defines the retain time for archive data. # If this property is left blank or is not specified, then retain time specified for log will be taken as data retain time.
• We recomme	nd you to define same retain time to maintain the consistency

within all logs. However you can define different retain time for different logs.

Table 5: Properties Within archiveLog-cleanup.properties File

8. Save the file and restart the Kernel and WebRunner.

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HOW RE-SCHEDULING OF CLEANUP WORKS

At times the automatic cleanup of data, log, and archive files can be interrupted due to some process flow execution or any other reason. In such a situation you can easily reschedule the automatic cleanup of data, log, and archive files. This section describes the steps to configure the rescheduling of the cleanup process.

Steps to configure the schedule tasks

- 1. Click the **Administer** tab and then click the **Setup** menu. This action will display you all the options of the **Setup** menu.
- 2. Select the **Application Settings** menu option. This action will display you the **Application Settings** screen.
- 3. From the Application Settings screen, click on the Update System Properties. This action will display you the Update System Properties screen.
- 4. Expand the *Maintenance* properties parent node and then further expand the *Schedule Tasks* child node (see Figure 6).

Setup > Application Settings		
 Maintenance 		
Data Cleanup Properties		
Log Cleanup Properties	r	
 Archive cleanup Propertie Schedule Tasks 	5	
Bronosty Namo	abara autoBarabadulaClasarun anabla	
Property Name	apprilautokescheuulecleanup.enable	
Value	yes	
Description	Enable disable auto re-schedule cleanup for data, log and archive	
Note :- To activate this	property after any change, you need to Restart Server.	
Property Name	abpm.autoRescheduleCleanup.pollingTime	
Value	60	
Description	Polling time for auto re-schedule cleanup in minutes	
Note :- To activate this	property after any change, you need to Restart Server.	

Figure 6: Update System Properties (Schedule Tasks Properties)

5. Change the value of the properties as per your need. For your reference, Table 6 shows the list the properties along with their descriptions.

Table 6: Schedule Tasks Properties

Property Name	Description
abpm.autoRescheduleCleanup.enable	This property lets you choose if you want to enable or disable automatic rescheduling of cleanup for data, log and archive files. By default, the value is set to true.

Property Name	Description
abpm.autoRescheduleCleanup.pollingTime	This property defines the rescheduling time (in minutes) of the cleanup process for data, log, and archive files. By default 60 minutes is set. You can change the value as per your need.

6. Click the **Save** button and restart the Kernel and WebRunner.



APPENDIX A: CRON EXPRESSION

A Cron-Expression is a string comprised of 6 or 7 fields separated by white space. The 6 mandatory and 1 optional fields are as follows:

Field Names	Values	Allowed Special Character
Seconds	0-59	,-*/
Minutes	0-59	,-*/
Hours	0-23	,-*/
Day-of-month	1-31	,-*?/LWC
Month	1-12 or JAN-DEC	,-*/
Day-of-Week	1-7 or SUN-SAT	,-*?/LC#
Year (Optional)	empty, 1970- 2099	,-*/

- The '*' character is used to specify all values. For example, "*" in the minute field means "every minute".
- The '?' character is allowed for the day-of-month and day-of-week fields. It is used to specify 'no specific value'. This is useful when you need to specify something in one of the two fields, but not the other. See the examples below for clarification.
- The '-' character is used to specify ranges For example "10-12" in the hour field means "the hours 10, 11 and 12".
- The ',' character is used to specify additional values. For example "MON,WED,FRI" in the day-of-week field means "the days Monday, Wednesday, and Friday".
- The '/' character is used to specify increments. For example "0/15" in the seconds field means "the seconds 0, 15, 30, and 45". And "5/15" in the seconds field means "the seconds 5, 20, 35, and 50". You can also specify '/' after the '*' character in this case '*' is equivalent to having '0' before the '/'.
- The 'L' character is allowed for the day-of-month and day-of-week fields. This character is shorthand for "last", but it has different meaning in each of the two fields. For example, the value "L" in the day-of-month field means "the last day of the month" day 31 for January, day 28 for February on non-leap years. If used in the day-of-week field by itself, it simply means "7" or "SAT". But if used in the day-of-week field after another value, it means "the last xxx day of the month" for example "6L" means "the last Friday of the month". When using the 'L' option, it is important not to specify lists, or ranges of values, as you'll get confusing results.

- The 'W' character is allowed for the day-of-month field. This character is used to specify the weekday (Monday-Friday) nearest the given day. As an example, if you were to specify "15W" as the value for the day-of-month field, the meaning is: "the nearest weekday to the 15th of the month". So if the 15th is a Saturday, the trigger will fire on Friday the 14th. If the 15th is a Sunday, the trigger will fire on Monday the 16th. If the 15th is a Tuesday, then it will fire on Tuesday the 15th. However if you specify "1W" as the value for day-of-month, and the 1st is a Saturday, the trigger will fire on Monday the 3rd, as it will not 'jump' over the boundary of a month's days. The 'W' character can only be specified when the day-of-month is a single day, not a range or list of days.
- The 'L' and 'W' characters can also be combined for the day-of-month expression to yield 'LW', which translates to "last weekday of the month".
- The '#' character is allowed for the day-of-week field. This character is used to specify "the nth" XXX day of the month. For example, the value of "6#3" in the day-of-week field means the third Friday of the month (day 6 = Friday and "#3" = the 3rd one in the month). Other examples: "2#1" = the first Monday of the month and "4#5" = the fifth Wednesday of the month. Note that if you specify "#5" and there is not 5 of the given day-of-week in the month, then no firing will occur that month.
- The 'C' character is allowed for the day-of-month and day-of-week fields. This character is shorthand for "calendar". This means values are calculated against the associated calendar, if any. If no calendar is associated, then it is equivalent to having an all-inclusive calendar. A value of "5C" in the day-of-month field means "the first day included by the calendar on or after the 5th". A value of "1C" in the day-of-week field means "the first day included by the calendar on or after Sunday".
- The legal characters and the names of months and days of the week are not case sensitive.

Expression	Meaning
0012**?	12pm (noon) every day
0 15 10 ? * *	10:15am every day
0 15 10 * * ?	10:15am every day
0 15 10 * * ? *	10:15am every day
0 15 10 * * ? 2005	10:15am every day during the year 2005
0 * 14 * * ?	Every minute starting at 2pm and ending at 2:59pm, every day
0 0/5 14 * * ?	Every 5 minutes starting at 2pm and ending at 2:55pm, every day
0 0/5 14,18 * * ?	Every 5 minutes starting at 2pm and ending at 2:55pm, AND fire every 5 minutes starting at 6pm and ending at 6:55pm, every day
0 0-5 14 * * ?	Every minute starting at 2pm and ending at 2:05pm, every day

Here are some full examples:

Expression	Meaning
0 10,44 14 ? 3 WED	2:10pm and at 2:44pm every Wednesday in the month of March.
0 15 10 ? * MON-FRI	10:15am every Monday, Tuesday, Wednesday, Thursday and Friday
0 15 10 15 * ?	10:15am on the 15th day of every month
0 15 10 L * ?	10:15am on the last day of every month
0 15 10 ? * 6L	10:15am on the last Friday of every month
0 15 10 ? * 6L 2002-2005	10:15am on every last friday of every month during the years 2002, 2003, 2004 and 2005
0 15 10 ? * 6#3	10:15am on the third Friday of every month



APPENDIX B: MAIL SERVER PARAMETERS

Table 7 lists the mail server parameters that you need to configure if you want to get the mail notification in case any error occurs during archival

Property Name	Description
Mail Server Address/Exchange Server mailServer	Outgoing Mail Server. Example.(smtp.gmail.com)
systemAdminEmailId	Email Id from which the mail will be sent to the user.
adminUserId	Email Id to which the mail will be sent for archival or clean up failure.
mailServerUserId	User Id of the mail sender.
mailServerPassword	Password of the mail sender.
sslEnabled	Enable ssl.
mailNotification.port	Outgoing Mail Server port.

Table 7: Mail Server Parameters



APPENDIX C: LOG ARCHIVAL DATABASE CONFIGURATION

To enable Adeptia Suite to establish connection with the Log Archival Database you need to configure some properties. This section describes how to configure these properties.

Steps to configure Log Archival Database

- 1. Click the **Administer** tab and then click the **Setup** menu. This action will display you all the options of the **Setup** menu.
- 2. Select the Application Settings menu option. This action will display you the Application Settings screen.
- 3. From the Application Settings screen, click on the Update System Properties. This action will display you the Update System Properties screen.
- 4. Expand the *System* properties parent node and then further expand the *Log Archival Database Configuration* child node (see Figure 7).

Setup > Application S	Setup > Application Settings		
 Systems 			
Encoding			
Logging			
Log Archiv	vai Database Con	nguration	
Pro	operty Name	log.archival.jdbc.url	
Val	lue	jdbc:hsqldb:hsql://127.0.0.1:2477]
Des	scription	JDBC URL	
Not	e :- To activate this p	property after any change, you need to Restart Server.	
Pro	operty Name	log.archival.jdbc.dbclass	
Val	lue	org.hsqldb.jdbcDriver]
Des	scription	JDBC Driver Class	
Not	te :- To activate this p	property after any change, you need to Restart Server.	
Pro	operty Name	log.archival.jdbc.username	
Val	lue	sa]
Des	scription	JDBC User Name	
Not	te :- To activate this p	property after any change, you need to Restart Server.	
Pro	operty Name	log.archival.jdbc.password	
Val	lue	••••••]
Des	scription	JDBC Password	
Note :- To activate this property after any change, you need to Restart Server.			
Pro	operty Name	abpm.logs.archival.dbType	
Val	lue	HSQL]
Des	scription	Archival Log Database Type	
Not	e :- To activate this p	property after any change, you need to Restart Server.	

Figure 7: Log Archival Database Configuration

5. The tables below lists the Log Archival Database Configuration properties and their descriptions that you need to configure if the value of <u>abpm.logs.archival.database</u> property is set to 2 in the Data Cleanup Properties.

log4j.archival.jdbc.url

Description	Option to define the JDBC URL of the archival log database
Default Value	As specified during installation
Possible Values	Any valid jdbc url
Selection Criteria	This property specify the JDBC URL to connect to archival log database. This property is automatically populated as per the value given in the Log Database Configuration step during installation.

log4j.archival.jdbc.dbclass

Description	Database driver to connect to the archival log database.
Default Value	As per the log database selected during installation.
Possible Values	JDBC Driver of the log database, where the logs are archived.
Selection Criteria	This value is provided by the JDBC driver used to connect to log database. This property is automatically populated as per the log database server type selected at the time of installation.

log4j.archival.jdbc.username

Description	Username to access the archival log database.
Default Value	As specified during installation
Possible Values	Any user name, which has permission to create tables and insert records in the log database.
Selection Criteria	This property is automatically populated as per the user name specified in the Log Database Configuration step at the time of installation.

log4j.archival.jdbc.password

Description	Password of the username specified in log4j.archival.jdbc.username property
Default Value	As specified during installation
Possible Values	ΝΑ
Selection Criteria	This property is automatically populated as per the password specified in the Log Database Configuration step at the time of installation.

abpm.logs.archival.dbType

Description	Password of the username specified in log4j.appender.jdbc.username property
Default Value	As specified during installation
Possible Values	ΝΑ
Selection Criteria	This property is automatically populated as per the password specified in the Log Database Configuration step at the time of installation.