

Axiell ALM Hosting - Service Level Agreement

2017

This service level agreement (SLA) applies to the Axiell ALM Hosting services provided by Axiell ALM Netherlands BV, and includes the activities and facilities to be provided as agreed in writing, verbally and/or electronically, unless otherwise stipulated.

Dutch law applies to all agreements concluded by Axiell ALM Netherlands with the Client, unless otherwise agreed by the parties in writing.

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1 Introduction

The aim of this SLA is to define further performance levels in addition to those described in the Adlib Maintenance Agreement SLA. The Adlib Maintenance Agreement SLA is also applicable to the Axiell ALM Hosting services.

2 Definitions

Adaptive maintenance	Proactive maintenance; the objective being to adjust components due to external developments.
Additive maintenance	Proactive maintenance; the objective being to supplement components due to functional requirements.
Hardware	Equipment provided by the Client, or made available by the Service Provider to the Client, such as servers, PCs, network infrastructures and peripherals that are placed in the Service Provider's network, and are further outlined in the agreement.
Backup	Securing data by writing the data onto a back-up medium.
Availability	Availability of the service.
Operating system	The operating system that runs on the hosting hardware.
Call	A notification made to the Service Provider help desk. This can relate to an incident, query, request, wish or complaint.
Change	An amendment.
Contact person	Persons appointed by the Client and Service Provider to act as the contact person for all relevant issues regarding day to day hosting service operations.
Contract	The agreement concluded between the Client and the Service Provider.
Database	Collection of inter-related data provided by the Client that is accessible via the applications used by the Client.
Repair time	The time period, measured and registered by the Service Provider, between the fault call and the finish call by the Service Provider to the Client (or the time at which the Service Provider endeavours to pass on the call).
Incident	An (imminent) fault detected in the agreed-upon service level of the service provision.
Office hours	Work days between 09:00am and 05:00pm CET (GMT + 1).
Client portal	myAdlib client web site.
Month	A calendar month.
Maintenance Window	A predetermined period in which preventative maintenance is undertaken to prevent interruption to the service provision.
Notification	A call.
Adlib software	Collective name of the products and services package offered by Axiell ALM Netherlands.
Emergency number	The fault number to be called outside of business hours for fault notification.
Unavailability	The unavailability of the hosting service provided by the Service Provider to any single user as a result of an unscheduled incident.
Maintenance	The undertaking of repairs, precautionary measures and regular checks of the hardware installed, as well as planned maintenance.
Force majeure	A situation that arises as a result of an incident which neither the Client nor the Service Provider is culpable for, or (could) have exercised any influence over.
Perfective maintenance	Proactive maintenance; the objective being performance improvement.

Preventative maintenance	Proactive maintenance; the objective being fault prevention.
Priority	The order in which incidents, problems and changes are processed.
Problem	An (imminent) structural fault in the agreed-upon service level of the service provision.
Access	Products in the Adlib application range that relate to making information on the internet accessible.
Response time	The time period between a call made by the Client of an incident or a Request for Change and the commencement of activities in relation to solving such an Incident or implementing such a Change.
Service Window	The time specification agreed with the Client in which the Client can utilise a service provided by the Service Provider.
SLA	Service Level Agreement.
Software	The software installed and configured on the hardware by the Service Provider.
Software development	Activities that relate to the design, creation, adaptation, expansion and testing of software.
Fault	The unforeseen temporary or comprehensive failure of the service provision to the Client.
System environment	The total service package that enables the Client to use the applications.
Work day	Monday up to and including Friday with the exception of the generally accepted Dutch public holidays + Good Friday, May 5 th and December 31 st . Office hours are from 9:00 to 17:00.

3 General

3.1 Precedent of agreements

Order	Agreement
1	Framework Agreement
2	License Agreement
3	Maintenance Agreement (SLA)
4	Axiell ALM Hosting SLA

In the event of any conflicts or uncertainties arising in the aforementioned agreements, a higher ranking agreement will prevail. The order of precedent of the various agreements is given in the above table.

3.2 Contact persons

Each party will appoint a contract manager and fixed contact person. The contact details of the contract manager and contact person are shown in the contract. Changes to the contact details of the contract manager and contact person must be notified in writing. Operational communication will take place between the Client and Service Provider contact persons, as much as is possible.

3.3 General description of the services

This SLA relates to the services as outlined in the contract. This service includes the hosting of Adlib back-office applications and/or the hosting of Adlib Internet Server web applications. Hosting and support of 3rd party products such as websites may, per the

request of the Client, also be hosted and supported at an additional fee. These products and services will be listed in appendix Client Specific Parameters.

The hosting of Adlib back-office applications such as Adlib Archive, Adlib Library and Adlib Museum, is configured in a Windows Terminal Server environment. The Client's users (e.g. library staff) connect with the hosting server via Microsoft's Remote Desktop Connection program. For more detail on the hosting configuration see the appendix.

The licenses for Adlib products are included in the service as mentioned in the Appendix Client Specific Parameters, unless specified otherwise.

Standard disk space up to 100GB is included, unless otherwise agreed in the contract. This disk space is allocated for the Adlib file storage and is exclusive of the space required for the database.

Initial disk space may be configured at less capacity and will be expanded per the Client's request.

Additional disk space (> 100GB) can be configured at a fee.

Server administration, including management of user accounts, and maintenance for all Axiell ALM Hosting servers will be carried out by the Service Provider.

Microsoft licenses required for the hosting service are included in the service. This includes Terminal Server CALs, Windows CALs, MS SQL Server and MS Word. The Service Provider reserves the right to change the hosting fee if Microsoft changes the fees for their products.

The service includes the upgrading of the Adlib standard software to the latest versions.

The Service Provider will do its utmost to make problem-free services available at all times. In the event that a fault reduces availability the Service Provider is obliged to resolve the fault within the terms as stipulated in this SLA. The Service Provider is obliged to carry out regular checks and thorough maintenance of the hardware and systems provided, and to ensure that hardware and system capacity is such that upon normal usage levels no faults occur.

3.4 Duration of this SLA and hosting fee

The hosting period is for one year and will be invoiced in advance.

The hosting SLA will be renewed automatically unless cancelled in writing at least two months before the end of the hosting period.

The hosting fee will be index-linked to the Dutch Consumer Price Index at the start of each new hosting period.

3.5 Account management structure

Meetings can be arranged to take place at the request of one of the parties via the fixed contact persons.

Account meetings can cover the service provision at the operational level, work agreements, procedures, pending actions, outstanding issues, and other Adlib related issues.

Meeting notes will be made available to the Client by the Service Provider.

3.6 Service Window

Service Window as defined in this SLA.

Component	Service Window
Adlib Terminal Server: Adlib back office applications	24 hours per day, 7 days per week (except for scheduled maintenance windows)
Adlib Internet Server	24 hours per day, 7 days per week (except for scheduled maintenance windows)

3.7 Priorities table

Specification of priorities as defined by this SLA.

Priority	Significance
1.Immediate	Service provision failure
2.High	Partial breakdown / reduced performance
3.Low	Problems with limited consequences for the Client

3.8 Maintenance Window

Maintenance Window as defined in this SLA for scheduled maintenance.

Component	Maintenance Window
Adlib Terminal Server: Adlib back office applications	Work days outside of office hours (except for other agreed maintenance windows)
Adlib Internet Server	Work days outside of office hours (except for other agreed maintenance windows)

3.9 Response times

Response times as defined in this SLA.

Priority	Response time	Solution timeframe	Explanation
Immediate	Immediate	4 office hours	Upon incident notification the call is resolved within the applicable Service Window, within the response time + solution timeframe.
High	4 office hours	1 work day	Upon incident notification the call is resolved within the applicable Service Window, within the response time + solution timeframe.
Low	1 work day	For Service Provider to decide	Upon incident notification the call is resolved within the applicable Maintenance Window, within the response time + solution timeframe.

3.10 Backup and recovery procedure

Data backup and recovery is taken care of by the Service Provider as follows:

Component	Frequency	Timeframe	Medium	Retention period
MS SQL Server Database	Continuous	n.a.	SQL logging	The SQL logging allows a rollback of the database to a specific moment in time. The retention period is 1 month.
Application files and digital assets (images, documents, etc.)	Every file change	n.a.	Shadow copies	Shadow copies allow restoration of deleted files and previous versions of files. The retention period is minimum 1 month.
Full backup	See appendix	See appendix	File system / SQL Back-ups	Full backups are stored off site. The retention period is 3 months.

The Service Provider is responsible for the availability and reliability of these backup and restore facilities.

The Client can ask the Service Provider to restore their backup data. The Client and Service Provider will discuss the options and agree on the recovery procedures to be used. Invoicing for recovery procedures will (based on the standard hourly rate at that time) occur on the basis of hours spent, should the Client be responsible. If the need for a restore is the Service Provider's responsibility, then the restore will not be invoiced.

3.11 Maintenance, Planned maintenance, Emergency maintenance and Software development

For all the vital components of the Service Provider's central infrastructure preventative and planned maintenance will be carried out within the maintenance windows, to ensure that service interruption is kept to a minimum.

The Service Provider may agree with the Client on an alternative maintenance window, on a case by case basis.

3.11.1 Maintenance

In its service-related maintenance activities the Service Provider aims to minimise the noticeable effects on the service provision experienced by the Client as much as possible, by adopting the following measures:

- Important transactions are carried out during the maintenance window as much as is possible;
- Maintenance activities that the Client will notice are kept to an absolute requisite minimum;

- Maintenance activities will be combined as much as is possible.

During maintenance activities the service provision may be noticeably affected (priority levels 2 or 3); the Service Provider will do its utmost to prevent service failure (priority level 1).

3.11.2 Planned maintenance

Planned maintenance (preventative, perfective, adaptive and additive) to the network, servers and other relevant infrastructural matters can occur at any given time. The Client will be notified in advance. It is possible that during this maintenance period the hosting service will become wholly or partially unavailable to the Client (priority level 1: service failure).

Notification of planned maintenance will be communicated at least 24 hours prior to work commencing, and will contain the following information:

- Contact person details;
- Timeframe within which the planned maintenance will occur;
- Actual expected duration of the planned maintenance;
- The services which the planned maintenance will affect;
- Prioritisation.

Planned maintenance is not included in availability calculations unless the period for the planned maintenance is exceeded and the hosting service becomes unavailable to the Client as a result.

3.11.3 Corrective maintenance

Corrective maintenance may be necessary when circumstances require immediate intervention. In such a situation notification will be given to the Client as soon as possible. Unavailability during emergency maintenance is included in the availability calculation.

Software development

If upon the request of the Client software development is carried out on Service Provider products which in turn results in reduced availability, this will not be included in availability calculations. A test environment can be set up upon request. The setting up of client-specific test environments may incur additional costs. The initial configuration of a test environment on the same server(s) as an exact copy of the production system is included in the Hosting SLA.

3.12 Availability

A guarantee applies to the availability of the hosting environment, as indicated on a yearly basis in the table below.

The Service Provider does not guarantee constant communication over the internet, or that a connection can always be made with another piece of hardware connected to the internet. By unavailability it is understood to mean if a hosting service provided by the Service Provider is not usable to any users at all due to an unscheduled event. If a service is unusable to a certain number of users, or does not function properly, then this is understood to mean an incident whereby the service itself is reported to be available.

The responsibility of the Service Provider with regard to availability, such as formulated in this SLA, does not apply to faults if:

- Planned activities are carried out;
- The fault occurs as a result of a fault in the telecommunication structure of third parties;
- A breakdown is caused by a Client Request for Change;
- A breakdown is caused by changes made by Client personnel to the Service Provider's hardware, platform or Adlib configuration;
- Force majeure prevails.

Service availability (**A**) is calculated, at one or several locations, as follows:

$$A = 100\% * [1 - (t: T)]$$

t = the number of minutes the service was unavailable during a given year (service failure)

T = total number of minutes per year

Availability	Total unavailability (HH:MM:SS)		
	Per day (average)	Per month (average)	Per year
99.7%	00:04:19	02:09:30	25:54:00

4 Incident Management

4.1 Objective

The objective of Incident Management is to resolve faults in the service provision to the Client as quickly as possible. Client interruption to work must be kept to a minimum, and resumption to normal activities must occur as quickly as possible.

This is achieved by accepting, registering, assessing, solving and concluding Client calls via the client portal and help desk.

4.2 Input

Client notification via the client portal runs from the Client contact person to the Service Provider help desk.

The call must contain the following components:

- Name of the person reporting the call;
- Telephone number and email address of the person reporting the call;
- The date (possibly time too) the Incident occurred;
- Description of the incident;
- Module where the incident occurred;
- An estimated priority by the Client.

4.3 Output

Upon receipt the call progress can be tracked on the client portal.

4.4 Process and Actions

Process step	Description	Result	Actioned by
Registration & Classification	The Client is heard; the call is interpreted and registered in the client portal.	Call is diagnosed	Service Provider
Investigation & Initiation	Those responsible for finding a solution are allocated. The Client is informed of the proposed resolution action. The person responsible may be: 1. The Service Provider; 2. Another party; it may also be a party whom the Client has an agreement with; 3. The Client	Solution action is determined and issued	Service Provider
Resolution & Repair	Service Provider responsible: the action is carried out in accordance with Service Provider procedures. Other Parties responsible: the action is no longer covered by this SLA; the Service Provider shall pass the call on to the third party responsible for resolving the problem. Monitoring progress is the responsibility of the Service Provider. The Client responsible: the action is diagnosed as the responsibility of the Client and not covered by this SLA. The Client should be able to resolve the issue.	Incident is resolved	Service Provider, Third Parties
Conclusion	When the incident has been resolved, it is closed on the client portal.	Call is closed	Service Provider

4.5 Formal agreements between the Service Provider and the Client

Service Level	Standard
Response time	Times are determined by priority (see the priority table explanation, section 3.7 of the SLA).

4.6 Contact

The various contact options for an incident report are listed in the tables below:

4.6.1 Calls

Priority	Method
1	Via the help desk phone number Via general phone number
2	Via client portal Via help desk e-mail Via the help desk phone number Via general phone number
3	Via client portal Via help desk e-mail Via the help desk phone number Via general phone number

During office hours

Help desk direct phone number: +31 346586801

General Axiell ALM phone number: +31 346586800

Any time

Help desk e-mail: alm.nl.helpdesk@axiell.com

Client portal: <http://my.adlibsoft.com/>

4.7 Conditions and exclusions

- The Service Provider is not available outside of office hours, unless otherwise agreed.
- Calls submitted outside of office hours are processed on the following work day.
- All calls caused through repeated or systematic improper use by Client employees are to be immediately communicated to the Client.
- Calls that, upon consultation with the Client, are placed on hold are not covered by the agreed-upon Service Levels, until the status is changed upon consultation between the Client and the Service Provider.
- The Client must ensure that in its contracts with third parties the Service Provider is informed about the status and progress of any calls referred to these parties.

5 Problem management

5.1 Objective

The objective of problem management is to improve service provision quality by investigating the cause of incidents and to resolve them. In other words: the objective of problem management is the structural resolution of incidents, and to learn from them.

5.2 Input

- Incident list per category.

5.3 Output

- Upon commencement a call is reported to the Client
- A resolved problem

- Potential further progress reports regarding the problem

5.4 Process and actions

Process step	Description	Result	Actioned by
Registration & Classification	The input (see above) is assessed and interpreted. Subsequently a 'Problem Record' is created in the system with a priority code.	Problem is determined	Service Provider
Organisation & Initiation	Prior to resolving a problem a proposal is determined and issued.	Proposal is determined and issued	Service Provider
Analysis	The problem is investigated in accordance with the proposal and the cause is investigated; where necessary in conjunction with third parties. The impact and risk of the potential change are analysed. Communication with the Client may occur if they need to become involved.	Cause of the problem is investigated	Service Provider / Client
Conclusion	If the problem can be resolved a change is implemented.	Problem is resolved	Service Provider

6 Security

The Service Provider recognises the importance of securing the client's data. In order to guarantee optimum security both the Service Provider and the Client will undertake the following measures:

- The Service Provider provides SSL certificates for the hosting servers.
- The Client is responsible for the persons they have authorised to have access to the software that is part of the system environment, as well as the applications.
- The Service Provider will consider which employees are authorised to adjust authentications and authorisations in the Client's environment.
- If a server is hit by a security incident the Service Provider will consider what the subsequent procedure will be, if necessary patches will be installed in the short-term. If as a result the Service Provider's service is interrupted the Client will be notified of this immediately.
- In the event of serious security problems – either to hardware or software – the Service Provider will consider what the subsequent procedure will be. If necessary, patches will be installed in the short-term. If this transpires to be insufficient the Service Provider will, upon consultation, proceed to reinstalling the server. If as a result the Service Provider's service is interrupted the Client will be notified of this immediately.
- The Service Provider provides no guarantees and accepts no liability with regard to the security of network connections and stored data. The Service Provider will do its utmost to prevent unauthorised physical and logical access to data, and to keep the Client's information confidential.

7 Data centre

The Service Provider uses a green (sustainable) data centre that is built compliant with Tier III specifications of the TIA-942 data centre standard. The following applies:

- Data centre supplier is ISO9001, ISO27001, ISO14001 and NEN7510 certified.
- Redundant power supply
- Advanced climate system that minimizes deviation in temperature and humidity
- Emergency power supply: UPS and generator
- Green (sustainable) power is used
- Double power feeds to racks
- Each rack has its own UPS
- Each rack has its own ATS (Automatic Transfer Switch)
- Green (sustainable) adiabatic climate system
- Floor humidity detection

All Axiell ALM Hosting server hardware and storage hardware is owned by the Service Provider. Physical security is organised as follows:

- 24/7 surveillance of the datacentre.
- Access control by security tags and finger prints.
- Fire detection- and automatic fire extinguishing system
- Access to the server area is limited to system administrators, IT manager and director.
- Floor humidity detection system reports direct to the security provider.

The data centre is owned by Eurofiber BV and located at Kon. Wilhelminaweg 471 at Groenekan, The Netherlands.

8 Service Level Reports

8.1 Operational Service Level Reports

Relevant information is made available via the client portal. An extended report based on this data can be compiled upon request.

Category	Description
Incidents	<p>Overview of total number of reported incidents for the period in question, with:</p> <ul style="list-style-type: none"> • priority; • description; • status; • lead time.

Category	Description
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Problems	Total number of created and/or reported problems for the period in question, with: <ul style="list-style-type: none"> • priority; • description; • status; • lead time.
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Category	Description
Availability hosting environment	Total environment percentage availability

Category	Description
Security	Overview of security incidents given in: <ul style="list-style-type: none"> • description; • status.

9 Ownership of data

At all times, the Client will remain the owner of the data that is stored and managed in the Adlib databases. The Client will have full custody over the content of their Adlib database and Client specific digital assets such as images and electronic documents.

10 Exit procedure

Upon termination of this SLA, the Service Provider will agree with the Client on the best method of transferring the data and digital assets. If the Client will not continue working with Adlib, the content of the Adlib database can be made available in either Adlib tagged or Adlib XML format. The work involved is not included in the SLA. Based on the agreed specifications of the transfer of data, including data format and hardware/media to be used, a quotation will be made.

If the Client wants to continue working with Adlib in their own network infrastructure, the Client will require a license for the Adlib software. If the Client did not purchase an Adlib license prior to entering into the hosting agreement, they will need to purchase an Adlib license. If the Client had already purchased an Adlib license prior to entering into this hosting agreement, the Client can continue using this Adlib license. The Service Provider will make up to date Adlib software available for local use at the time of the transfer. For further Adlib updates and support a maintenance agreement will be required.

11 Appendix: Client specific parameters

Hosting account information

Description	Price per year

After the first year, CPI indexing will commence.

Start of hosting period:

Test environment (if applicable)

Service Provider will install a test environment for the Client.
Description of test environment

Exit procedure and hardware ownership (if applicable)

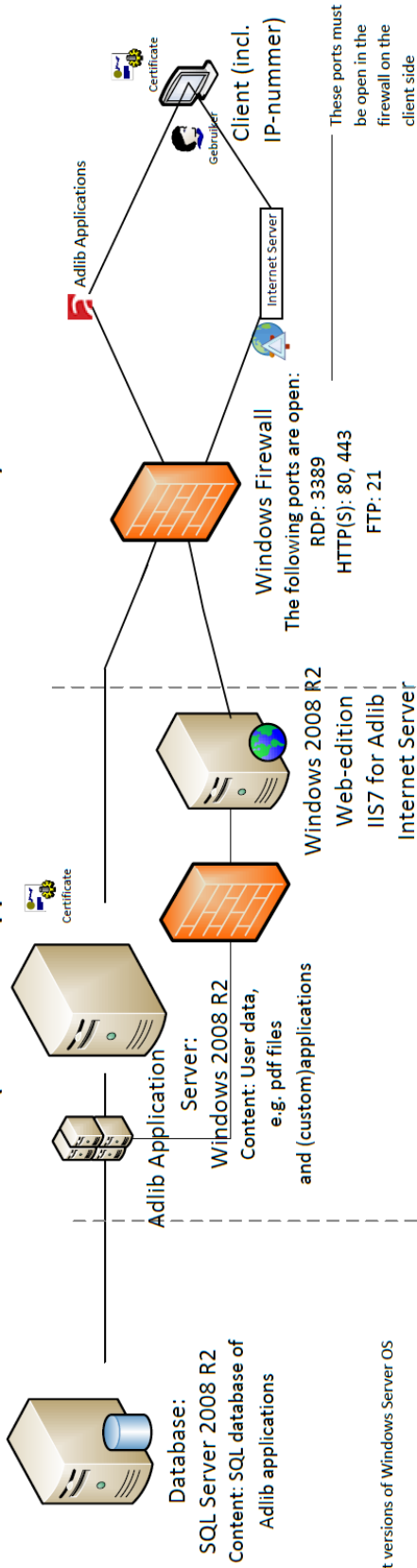
This section describes any client specific exit agreements.

Invoicing (if applicable)

This section describes any alternative invoicing agreements.

12 Appendix: Description of Axiell ALM Hosting configuration

Adlib Hosting (Back-office Application and Adlib Internet Server)



All servers run 64-bit versions of Windows Server OS

Security of data in MS SQL Server database:	Security of files	Security of connection
<p>Level 1: Redundancy <i>Mirroring</i> (based on RAID10) writes the data to two mirrored databases on two database servers. This ensures speed. If server hardware fails, the mirror takes over automatically without loss of data.</p> <p>Level 2: High availability <i>Logging</i> ensures fast availability of data. Via a roll-back the database can be set back in time to before the moment an incident occurred.</p> <p>Level 3: Back-up <i>Full back-up</i> is a complete back-up of the database and Client files (application files and digital assets) Retention scheme: - daily back-up (up to two weeks back a restore is available) - weekly back-up (up to one month back, weekly restores are available) - monthly back-up (up to 3 months back, monthly restores are available)</p> <p>Level 4: Off-site Back-up <i>Full back-ups</i> are copied every day to an off-site location (outside the data centre). In case of damage to the data centre (e.g. in case of fire), back-ups remain available for a full restore.</p>	<p>Level 2: High availability <i>Shadow copy</i> ensures fast availability of data. Previous versions of Client data files (application files and digital assets) and deleted files can be restored.</p>	<p>Level 1: Remote Desktop The connection is made via the encrypted Remote Desktop Protocol (RDP). Per request, the RDP connection can be limited to the Client's IP-number range.</p> <p>Level 2: Client identification The Client has a certificate. This certificate can be verified by the Adlib server for every connection.</p> <p>Level 3: Server and Client identification The Client has a certificate and provides a certificate for the Adlib hosting server. The connection will then be verified server side and Client side.</p>

Level of security