

#### <u>Alma Uptime Report - EU00 Instance (Europe) - Q3 2014</u>

Alma Uptime Quarterly Reports are published each quarter to provide a comprehensive view of our uptime performance during last 12 months. The report measures our performance as defined in the Alma Service Level Agreement.

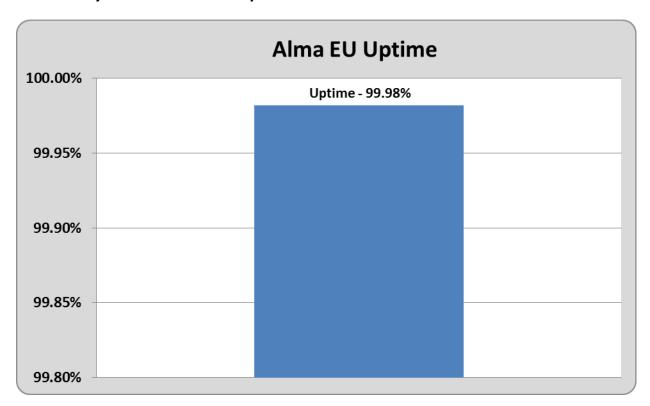
This document details the uptime report for the Alma EU00 instance in Europe.

The instance your organization uses can be identified by the Alma URL (EU00 instance is eu.alma.exlibris.com).

The uptime percentage for the period of this report (October 2013 – September 2014) is 99.98%.

Please note our System Uptime Status page, which allows our customers to view the current status of their instance/environment at any time, using the following link: <a href="http://status.exlibrisgroup.com">http://status.exlibrisgroup.com</a>

#### **Availability – October 2013-September 2014:**



# Unscheduled downtime events during Q3 2014:

Start time (CET)	End time (CET)	Duration (minutes)	Description
14:06	14:42	36	Ex Libris Database Administrators investigated this event to determine the root cause analysis with the following results: An internal Oracle process was found to impact other processes resulting in an abnormal database operation. This caused degradation in performance of the entire instance of Alma.  Ex Libris has taken the following action items and preventive measures to avoid such an occurrence in future:  * Once issue was experienced, Ex Libris' cloud engineers examined the processes causing performance issues and disabled them to allow an immediate relief.  * Ex Libris' cloud engineers have identified a way to bypass the Oracle internal process that was causing the performance problems and are testing it. The correction was distributed to all Alma instances, in all data centers.
17:47	17:56	9	A process got stuck in the Alma database, leading to a chain reaction resulting in downtime. It took several minutes for the database to get restarted.  In order to avoid such an occurrence in the future, Cloud Engineering has established an improved monitoring designed to spot and handle such stuck processes before they result in downtime.

<sup>\*</sup> Root cause analysis (RCA) reports for the downtime events could be found <a href="here">here</a>

# Scheduled maintenance events during Q3 2014:

Date	Start time (CET)	Duration (minutes)
July 6	21:30	45
July 13	21:30	26
July 20	21:30	21
August 3	21:30	37
August 10	21:30	27
August 24	21:30	28
August 31	21:30	34
September 7	21:30	27

# Total unscheduled downtime minutes during past 12 months:

Quarter	Total Unscheduled downtime in Quarter (minutes)
Q4 2013	0
Q1 2014	12
Q2 2014	40
Q3 2014	45

### **How is Alma Uptime Calculated?**

The uptime calculation is based on the following calculation (as defined in the Alma Service Level Agreement):

"Uptime" means the total period in minutes during which the Service is available for access and use during this period.

"Uptime Percentage" means Uptime expressed as a percentage, calculated in accordance with the following formula:

Uptime Percentage =  $X/(Y-Z) \times 100$ 

Where:

X = Uptime

Y = Last 12 months period

Z = The duration (in minutes) of any SLA Exclusions\* during these

12 months

#### **Further Information**

For questions on this report please contact Ex Libris through your usual channel.

<sup>\*</sup>SLA exclusions are defined in the contract SLA (e.g. Scheduled maintenance, etc.)