Alma Uptime Report - EU00 Instance (Europe) – Q4 2014

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 (January 2014 – December 2014) is 99.94%.

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: http://status.exlibrisgroup.com

Availability – January 2014-December 2014:
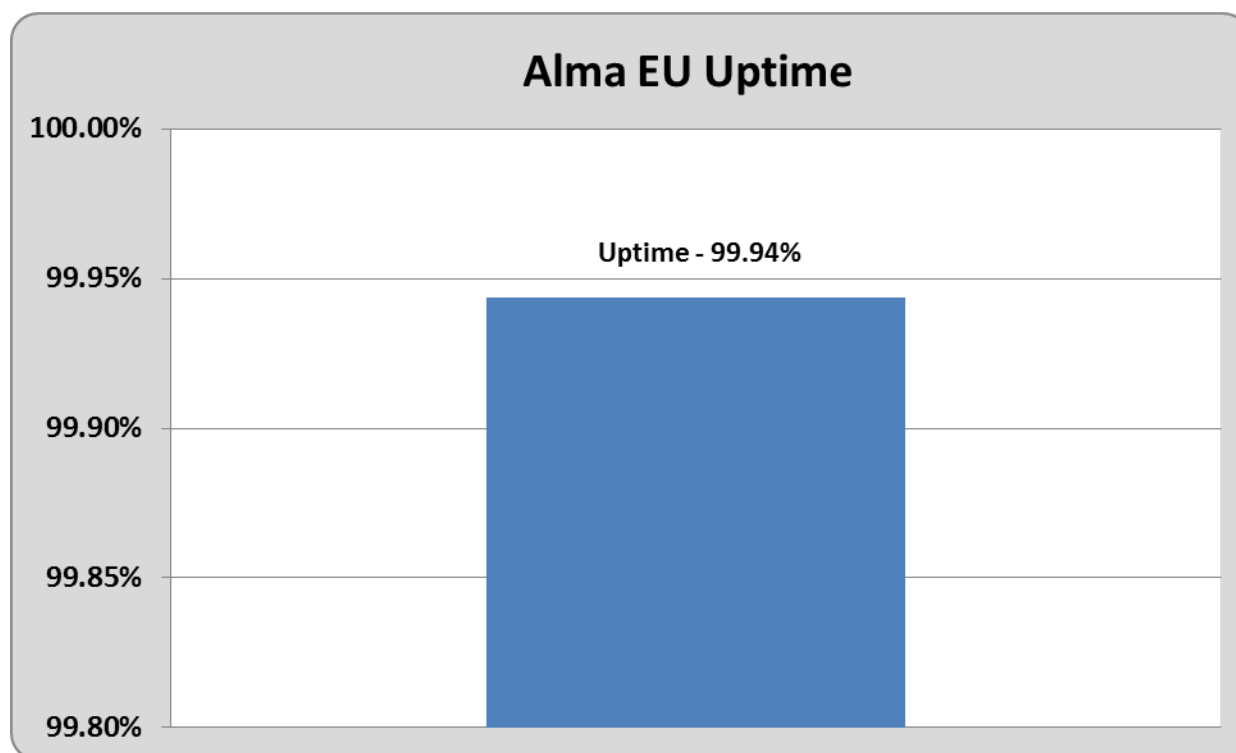
Unscheduled downtime events during Q4 2014:

Date	Start time (CET)	End time (CET)	Duration (minutes)	Description
October 2	15:38	16:03	25	The service interruption was a result of an application defect that impacted memory consumption on multiple components simultaneously. Ex Libris has taken the following action items and preventive measures in order to avoid such an occurrence in the future: * Ex Libris' Development team has created a system monitoring alerts mechanism that alerts before the system reaches similar cases. This allows Ex Libris to handle similar issues before they may create downtime events. * A permanent fix for this issue has been released in the December 2014 release.
November 5	20:42	22:05	83	Ex Libris' cloud engineers were conducting investigation into a known bug in the Firewall software causing performance degradation. During the investigation procedure, a human error triggered an unscheduled firewall failover. This action caused both redundant firewall appliances to fail and required a manual intervention to reboot the firewalls in a gradual controlled procedure. Once the manual reboot took place, the service was restored. Ex Libris has taken the following action items and preventive measures in order to avoid such an occurrence in the future: * Ex Libris has updated the Firewall troubleshooting procedures imposing stricter control over troubleshooting steps that could be taken outside of the regular maintenance window. * In order to improve resolution time in cases of network issues requiring manual intervention, Ex Libris is in the process of deploying a new network tool (out-of-band management solution), allowing the cloud engineers to response faster with remote troubleshooting capabilities.

November 23	11:50	13:20	90	Some of Ex Libris Alma customers have experienced one or more of the following issues: * Inability to connect from self-check machines. * Inability to log from Primo to Alma. * Processes/activities including FTP or Email failing. A human error during the configuration of Alma EU00 infrastructure upgrade, has resulted in service interruptions as described above. Ex Libris has taken the following action items and preventive measures in order to avoid such an occurrence in the future: * The work procedures that have been used during the infrastructure upgrade work have been reviewed and updated to include additional monitoring steps. * The testing procedures that are used after an infrastructure upgrade have been reviewed, updated, and extended in order to include additional functions and services.

Please note that a single customer on EU00 experienced an additional issue on November 23 (between 16:29 – 17:09 CET), where login issues have occurred. Other customers on EU00 did not experience any issues at that time.
It was not taken into account when calculating the uptime percentage; yet, we believe it is important to mention it here.

* Root cause analysis (RCA) reports for the downtime events could be found here

Scheduled maintenance events during Q4 2014:

Date	Start time (CET)	Duration (minutes)
November 1	21:30	35
December 6	21:30	60
December 13	21:30	50

Total unscheduled downtime minutes during past 12 months:

Quarter	Total Unscheduled downtime in Quarter (minutes)
Q1 2014	12
Q2 2014	40
Q3 2014	45
Q4 2014	198

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) × 100

> Where:
> X   =   Uptime
> Y   =   Last 12 months period
> Z   =   The duration (in minutes) of any SLA Exclusions* during these 12 months

*SLA exclusions are defined in the contract SLA (e.g. Scheduled maintenance, etc.)

Further Information

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