

Date: September 15, 2023



Jari Heikkinen

Modirum OU
Narva Mnt 5-58
Tallinn 10151
ESTONIA

Re: *EMVCo Letter of Approval – EMV 3-D Secure Directory Server Product*

Approval / Reference Number: 3DS_LOA_DIS_MOMD_020301_00781

Approval Date: September 15, 2023

Approval Expiration Date: September 14, 2025

Product Provider Name: Modirum OU

Registration Number: MOMD.V 17 0008

Directory Server Name: Modirum Directory Server

Directory Server Version: 1.2

Operating System or Virtual Machine Name and Version: FreeBSD 12.1

Implementation Conformance Statement: 3DS_ICS_DIS_MOMD_020301_00781

EMV 3-D Secure Specification: Version 2.3.1.1,
Version 2.2.0,
Version 2.1.0

EMV 3-D Secure Specification Bulletin(s): SB204 v7, SB214 v3, SB255 v2

3-D Secure Test Plan Name: EMV® 3-D Secure 2.3.1 Test Plan

3-D Secure Test Plan Version: 2.3.1.10

3-D Secure Test Plan Bulletin(s): N/A

EMV 3-D Secure Specification Bulletin(s) tested: SB204 v7, SB214 v3, SB255 v2

Dear Jari Heikkinen,

EMVCo, LLC ("EMVCo"), a Delaware limited liability company, has received your request for EMV 3-D Secure approval for the Directory Server identified above. In connection with your request for approval, we have reviewed your report, identified by file number UL_CompTestReport_ID4359 which was generated by UL TS B.V..

After assessing such file, EMVCo has determined that the above referenced Directory Server sufficiently conforms to EMV® 3-D Secure – Protocol and Core Functions Specification.

EMVCo hereby grants your Directory Server EMV 3-D Secure Approval, based on the requirements stated in the EMV 2.1.0, 2.2.0, and/or 2.3.1 Specifications. Please note that EMVCo may publicly identify your Directory Server as an approved Directory Server, including in EMVCo's published list of approved 3DS Products.

EMVCo's grant to your Directory Server is subject to the Specific Terms and Conditions to the Letter of Approval attached hereto as Attachment A. Because EMVCo's grant is subject to such limitations, including certain events of termination, you and any third parties should confirm that such approval is current and has not been terminated by referring to the list of approved Directory Server published on the EMVCo website (www.emvco.com)

This Letter of Approval is valid while the approval number is posted on the EMVCo website.

EMVCo, LLC

By:

Name:

Title: EMVCo 3-D Secure Testing Group Chair

Attachment A

Specific Terms and Conditions to Letter of Approval

During testing, the following issues were identified. Restrictions identified must be disclosed to customers (issuers or other product providers to whom the Product Provider intends to sell the product).

Restrictions, if any:

Comments, if any:

Attachment B Supported Options

This product has been tested for the following DS options:

DS supports Card Range Data File download	<input type="checkbox"/>
DS supports the Partial Cache update	<input type="checkbox"/>
DS supports Card Security Code	<input type="checkbox"/>
DS able to creates the ARes message on the ACS's behalf	<input type="checkbox"/>