DISCOVER® | GLOBAL NETWORK

ProtectBuy®

Discover® ProtectBuy®
ACS Provider Certification Manual

November 2020

What's Inside

1. About This Document

1.1. Purpose of this Manual

The Discover® ProtectBuy® ACS Provider Certification Manual (this "Manual") was developed by DFS Services LLC ("DFS" or "Discover") to define the requirements for the purposes of certification of an Issuer/ Issuer Processor, Third-Party Service Providers and/or other entities responsible for implementing components and services required for participating in Discover ProtectBuy.

1.2. About Discover® ProtectBuy®

Discover ProtectBuy aims to mitigate card-not-present fraud risk and reduce chargebacks by verifying the customer's identity at the time of transaction in an e-commerce environment.

Discover ProtectBuy has been developed building upon the latest EMV® 3-D Secure Protocol and Core Functions Specification (the "EMV 3DS Specification").

Discover ProtectBuy provides additional security and a potential for higher approval rates for digital transactions while enhancing the authentication experiences for all the participants in the value chain. This is achieved using (a) user-friendly cardholder verification methods and (b) risk-based authentication methods.

This Manual focuses on Discover Network and Diners Club International®. Where specific differences between these networks need to be called out, the individual networks are named.

1.3. Target Audience

DFS produces this Manual for Access Control Server (ACS) Service Providers, either third-party, software as a service, or the proprietary server solution of an Issuer (the "Provider") participating in Discover ProtectBuy.

1.4. Document Scope

This Manual describes the certification process specific to the verification of Discover ProtectBuy authentication messages using qualified tools and test plans.

EMV® is a registered trademark in the U.S. and other countries and an unregistered trademark elsewhere. The EMV® trademark is owned by EMVCo, LLC.

1.5.   Terminology

Throughout this Manual, the following terminology applies, except as otherwise expressly provided in this Manual or in your agreement with DFS.

Convention	Description
"shall" or "must"	Refers to a mandatory operation.
"should"	Refers to recommended operation.
"may"	Refers to an optional operation.

1.6.   Supporting Documentation

The following table lists the relevant supporting documentation for this Manual. All these documents are available from your Account Executive or Certification Project Manager.

Title	Reference
Discover® ProtectBuy® Issuer Implementation Guide	[DP I IG]
Discover® Global Network ProtectBuy® ACS Test Cases	[DGN PB ACS Test Cases]
Discover® Global Network Security Officer Registration Form	[DGN SORF]
Discover® ProtectBuy® Issuer Project Request Form	[DGN PB I PRF]

1.7.   Contact and Inquiries

All requests or inquiries should be addressed to your Account Executive.

Section 2. Certification Process

This section provides an overview of the Certification and Production Onboarding phases for Providers participating in Discover® ProtectBuy®.

The certification process can be initiated by Providers that already (a) have a contractual agreement with DFS, and (b) have been onboarded and integrated to the Discover ProtectBuy Certification Test Lab (CTL) as part of their implementation project, as indicated in the process chart below.

The high-level certification process is defined in the diagram below, highlighting the relevant steps from both the Provider and DFS point of view.
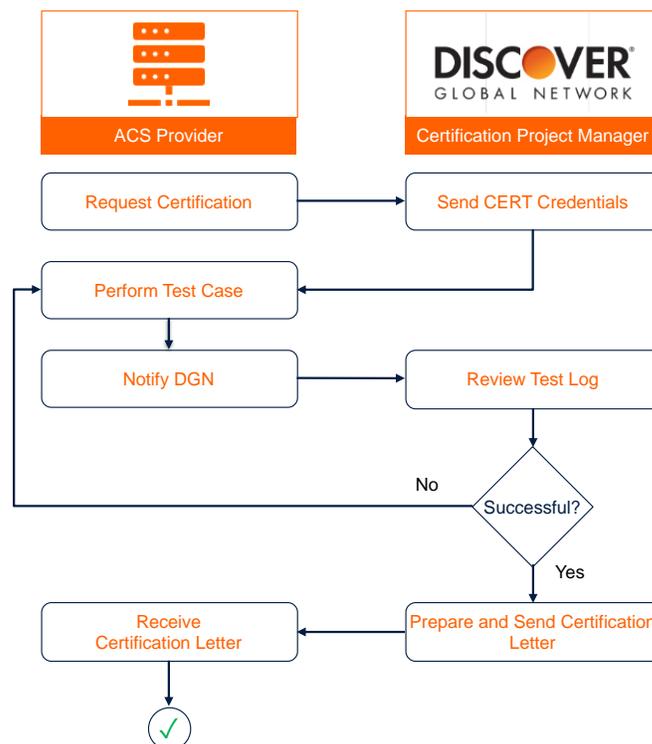
All phases of the certification process, as well as the prerequisites for the Providers, conditions of the Certification Letter, production onboarding and recertification are discussed in detail in this Manual.

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2.1. Prerequisites

Before initiating the Discover® ProtectBuy® implementation project, the following prerequisites must be met.

Prerequisite	Description
EMVCo Certification	The Provider must be EMV certified and have a valid Letter of Approval or Reference Number. The Provider must support all the EMV 3DS versions that are lower than the one for which the 3DS Server certified.
PCI-DSS Compliance	The Provider must be in compliance with PCI-DSS requirements.

2.2. Participants of the Certification Process

The Discover ProtectBuy certification process is managed between the Provider and DFS. DFS does not accredit any third-party service providers to conduct Discover ProtectBuy-related certification processes on its behalf.

2.3. Engagement

DFS will assign an Account Executive and a Certification Project Manager to assist the Provider undergoing certification testing.

The Provider must work with its Certification Project Manager to determine the:

- Test cases to be performed;
- Test environment, including interfaces and connection details; and
- Test schedule and certification planning.

2.4. Certification Planning

The Discover ProtectBuy certification process encompasses the following phases:

- Request Certification
- Perform Test Cases
- Notify
- Receive Certification Letter

DFS will start securing the necessary resources in the DFS Certification team upon receiving the request for certification. In order to achieve an optimal timeline, the Provider is advised to plan accordingly and communicate the plan to DFS with a minimum of ten (10) days' notice from the targeted certification start date.

2.5.   Request Certification

The request to initiate certification is sent by the Provider following a successful Project Setup phase as described in the Discover® ProtectBuy® Issuer Implementation Guide [DP I IG]:

- The Provider receives, populates and submits the Project Request Form [DGN PB I PRF] and the Security Officer Registration Form [DGN SORF].
- Kick-off meeting to discuss the implementation options.
- The Provider downloads the appropriate certificates from the Discover® Certificate Authority (CA) Portal.
- The Provider receives the applicable test cases.
- DFS will set up an instance of the Discover ProtectBuy CTL and share the URL and credentials with the Provider.

Note: Access to the Discover CA Portal will be provided after the submission of the DGN SORF.

2.6.   Perform Test Cases

Performing the applicable test cases received in the previous phase is the responsibility of the Provider.

In this section, the following aspects relevant to the execution of the certification test cases are discussed.

- Discover® ProtectBuy® CERT Environment
- System Under Test
- Discover® ProtectBuy® Test Cases

The Provider is expected to complete the execution of all applicable test cases within an agreed upon timeframe from requesting the certification. All test cases required for certification can be executed by the Provider independently, without supervision by DFS.
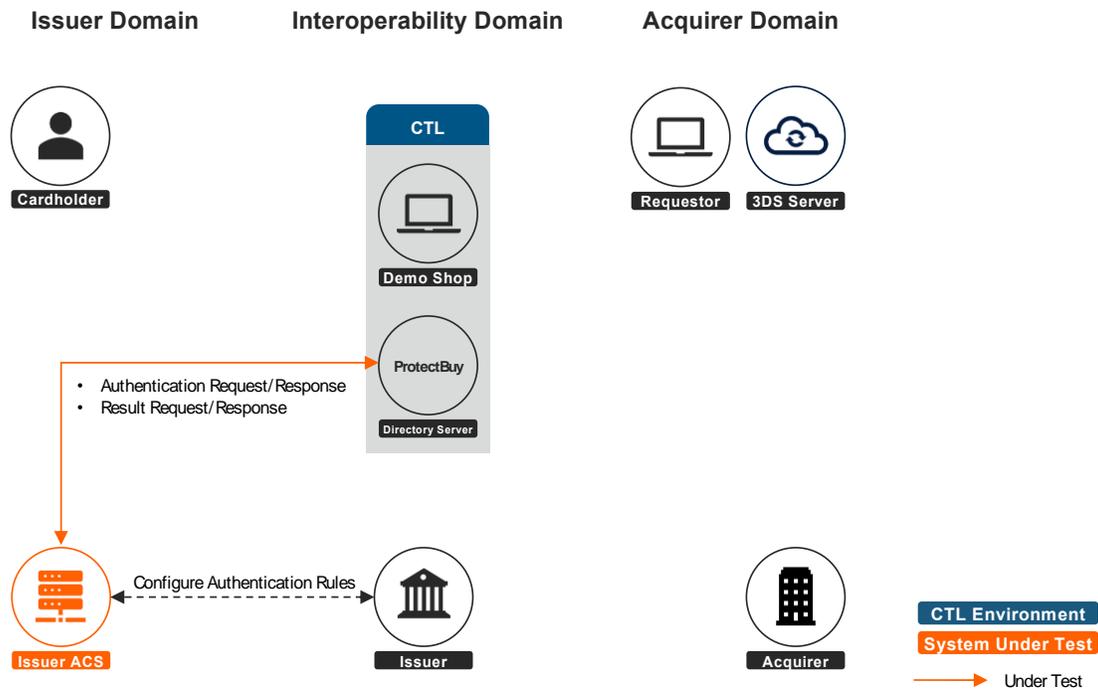
2.6.1.   Discover® ProtectBuy® CERT Environment

DFS will make the Discover® ProtectBuy® CTL environment (the "CERT Environment") available to the Provider for an agreed upon amount of time. The CERT Environment should not be used for regression testing or integration testing, but must be used for certification purposes.

2.6.2. System Under Test

In the CERT Environment, the Provider will receive all applicable test cases and test card numbers (if applicable) to run the test cases for certification purposes.

The systems under test for certification purposes are the Provider's ACS solution and the communication with the Discover ProtectBuy Directory Server as shown in the following flowchart.

Note: The Requestor environment for certification purpose (demo shop) is provided by the CERT Environment.

2.6.3. Discover® ProtectBuy® Test Cases

The Provider will receive the applicable test cases at the start of the onboarding process. For the purpose of certification, the Certification Project Manager may define a subset of test cases that are suitable for a specific Provider's implementation project. Unless otherwise specified, all tests in the test documentation are considered applicable, and thus required for certification.

The test documentation provides the Provider with a detailed description of the expected results of a successful execution of each of the test cases.

2.7.   Notify DFS

Upon completion of all test cases applicable for certification, the Provider notifies DFS to initiate the review of the test logs.

To request the review, the Provider must input all relevant information into the ACS Test Cases document, and forward the document and the transaction logs to their assigned Certification Project Manager.

2.7.1.   Review Test Log

Upon receiving the notification from the Provider, the DFS Certification team reviews the log files in the CERT Environment for each of the relevant test cases.

Should there be any issues, concerns, or questions, the DFS Certification team contacts the individual Provider identified in the contact information of the [DGN PB I PRF]. In case of errors and/or deviations from the applicable Discover® ProtectBuy® requirements, DFS may request the Provider to correct the error and re-run the applicable tests or a selection thereof.

All issues must be resolved and re-tested before certification is granted. When all applicable test cases have been executed successfully with no issues found in the log files, DFS will start preparing the Certification Letter.

Note: If the Provider is also responsible for submitting the authorization transactions directly to DFS, the host certification will also be needed prior to the issuance of the Certification Letter.

2.8.   Receive Certification Letter

In case of successful review, DFS will create and send the Certification Letter.

The Certification Letter will contain the:

- Product Provider Name
- EMV® 3DS Version
- Discover® ProtectBuy® 3DS Version
- Host Processing Release Version

While the Certification Letter is a necessary requirement, it is not sufficient to move to production. The Provider will receive the final approval to move to production upon successful completion of the Production Validation phase. For more detailed information on the Production Validation phase, refer to the [DP I IG].

2.9.   Production Onboarding

Upon successful completion of the Certification phase, the Provider is ready to move to Production Onboarding phase. In this phase, the Certification Project Manager will share the credentials needed to access the Discover ProtectBuy Directory Server in production.

The Provider is responsible for downloading and updating the required certificates from the Discover® CA Portal.

Note: During Production Onboarding, the Provider will be required to perform a test authentication transaction to test the newly established connectivity to the Discover ProtectBuy Directory Server in production.

Section 3. Recertification

The Provider must apply for recertification by contacting the DFS Account Executive, following the guidelines below.

Recertification is required when the Provider:
a) implements a new version of the EMV 3DS Specification;
b) implements additional features or other major changes within the DFS-certified EMV 3DS version (e.g., support of new authentication methods);
c) implements major changes to the authentication logic;
d) enables and wants to launch any other additional implementation options; or
e) Receives new technical requirements from DFS.

Recertification is not required when the Provider:
a) scales up the infrastructure (e.g., adding more instances of the same server application);
b) enrolls additional issuers to Discover® ProtectBuy®;
c) rebrands the previously certified server solution (e.g., re-configuring a white label ACS solution implementation to another issuer);
d) changes its hosting or cloud service provider (e.g., transitioning from AWS to Google Cloud); or
e) updates its security credentials.

Please consult your Account Executive to discuss whether recertification applies to cases that are not covered in the above guidelines.

3.1. Request Recertification

To request recertification, the Provider must contact the Account Executive. In addition, the Account Executive will contact the Provider should there be specification changes that require recertification. Depending on the specific update to the Provider's previously certified implementation, DFS shall provide the Provider with documentation regarding the applicable test cases for recertification.

Recertification tests are executed, reviewed and validated in accordance with the certification process described in this Manual.

Appendix A.   ACS Connectivity Guide

This Appendix A summarizes important steps of the certification and production processes for Providers participating in Discover® ProtectBuy®.

Certification Overview

In order to perform certification for its ACS implementation, the Provider will need to connect to the Discover ProtectBuy Directory Server through the Discover ProtectBuy CTL. To connect to the Discover ProtectBuy CTL, the Provider must:

1. Work with its internal network team to open its firewalls to the CERT Environment;

2. Use the provided IP address to point the ACS to the Discover ProtectBuy Directory Server in the CERT Environment; and

3. Install the required test certificates from the Discover® CA Portal[*] onto its ACS.

DFS will setup the CERT Environment and provide the set of applicable test cases. The Provider will need to provide the test PANs for the assigned test cases. Upon completing the test configuration, the Provider can initiate the transactions using the demo shop (Coffee House) and share the test results.

Certification Test Lab Connectivity

Your Certification Project Manager will share the credentials to access the Discover ProtectBuy Directory Server for certification.

Production Overview

Upon completing the Certification phase, the Provider is ready to go into the Production Onboarding phase. To ensure a successful launch of the ACS solution, the Provider must:

1. Ensure the Production Information section of the Discover ProtectBuy Project Request Form is complete and up to date;

2. Work with its internal network team to open its firewalls to the production environment;

3. Use the provided IP address to point its ACS to the Discover ProtectBuy Directory Server in production;

4. Install the required production certificates from the Discover CA Portal onto its ACS.

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[*] Access to the Discover CA Portal is obtained by completing and submitting the Security Officer Registration Form.

5. Validate receipt and processing of test transactions to ensure appropriate set-up.

Production Connectivity

Your Certification Project Manager will share the credentials to access the Discover® ProtectBuy® Directory Server in production.

Contact Information

For inquiries or general support, please contact your DFS Account Executive.