3-D Secure 2

Authentication options
and workflows

ecommpay

3-D Secure 2

EMV® 3-D Secure, or 3-D Secure 2, is a new version of the 3-D Secure protocol intended to secure e-commerce payments performed by using cards.

The key advantages of 3-D Secure 2:

- Extended payment options thanks to support for authentication in mobile apps.
- Enhanced security thanks to use of advanced authentication methods — for example by using biometric data.
- More convenient payment procedure thanks to the new *frictionless flow* for authenticating customer with no customer interaction.

Authentication flows in 3-D Secure 2

Challenge flow

Authentication with customer identity confirmation

Frictionless flow

Authentication with no customer interaction

The choice between frictionless flow or challenge flow is performed by the issuer.
Merchant can request preferable flow, though there is no guarantee the issuer will perform the payment by using merchant's preferred flow. Use the new challenge_indicator parameter in API to specify your preferable flow.
See the documentation for more information.

Authentication flow when using Payment Page and CMS plug-ins

Payment Page and CMS plug-ins support only the extended (native) workflow.
The extended workflow is optimized for 3-D Secure 2 and does not require any intermediate customer redirects.
It is recommended to collect and submit additional customer information, when using extended workflow for Payment Page integration mode.

Authentication flows when using Gate

When using Gate, you can select one of the two workflows:

Basic (proxy) **workflow**

The basic workflow is based on the existing 3-D Secure 1 workflow and allows merchants to support 3-D Secure 2 with minimum development effort, although this workflow requires multiple customer redirect operations.

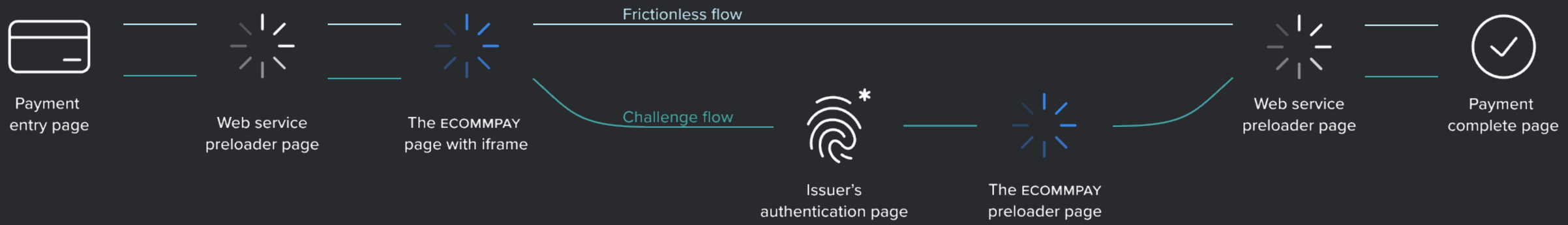
Extended (native) **workflow**

The extended workflow is optimized for 3-D Secure 2 and does not require any intermediate customer redirects, although it requires merchants to implement additional functionality in their web service.

Regardless of the authentication workflow, to increase probability of selecting the frictionless flow, it is recommended that merchant collects and submits additional information about the customer.

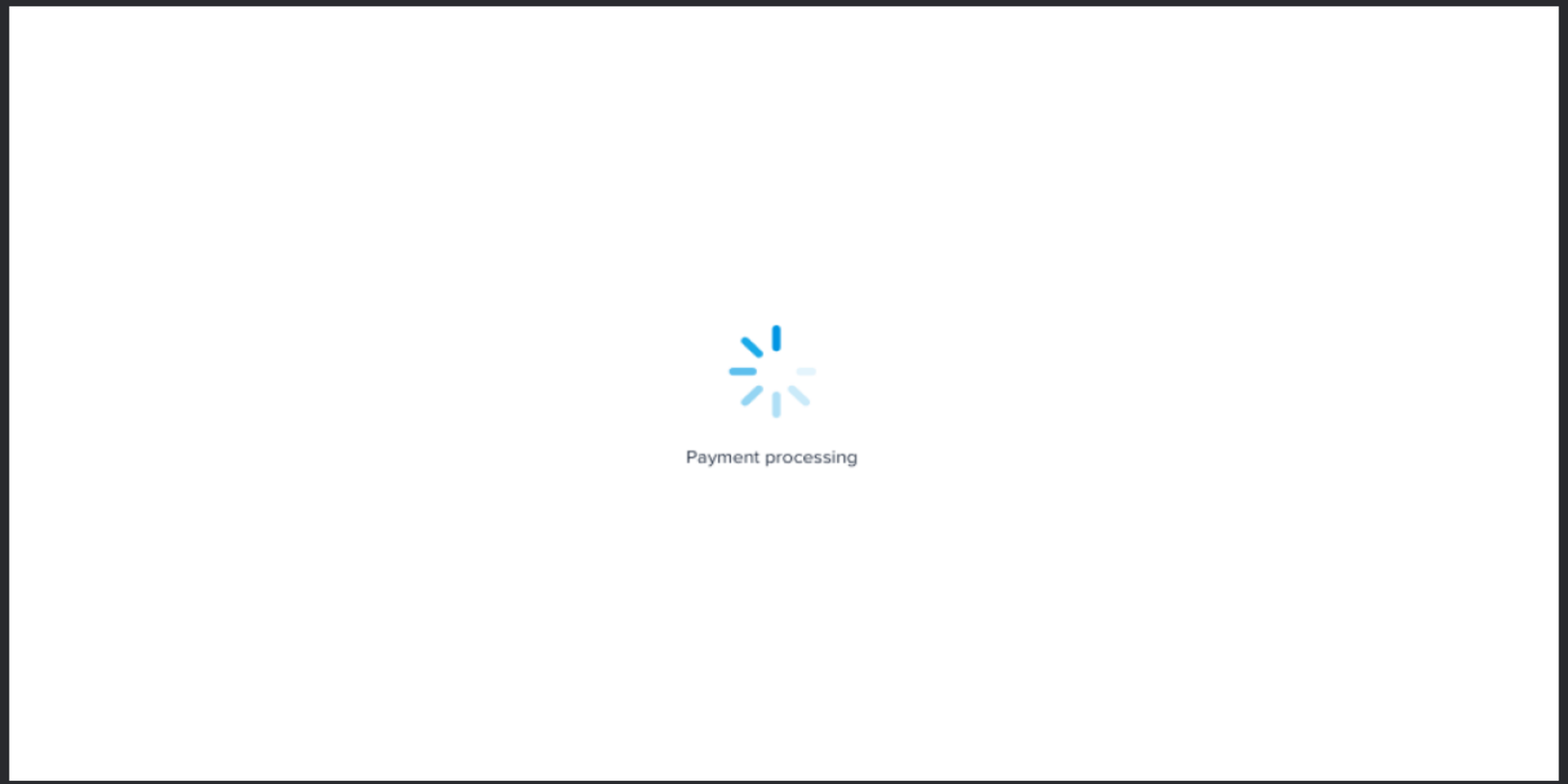
Authentication workflows Basic workflow

The basic workflow requires at least one customer redirect to the **ECOMMPAY** preloader page. If the issuer selects the challenge flow, the customer will be redirected to issuer's authentication page, and then back to **ECOMMPAY** and web service pages.



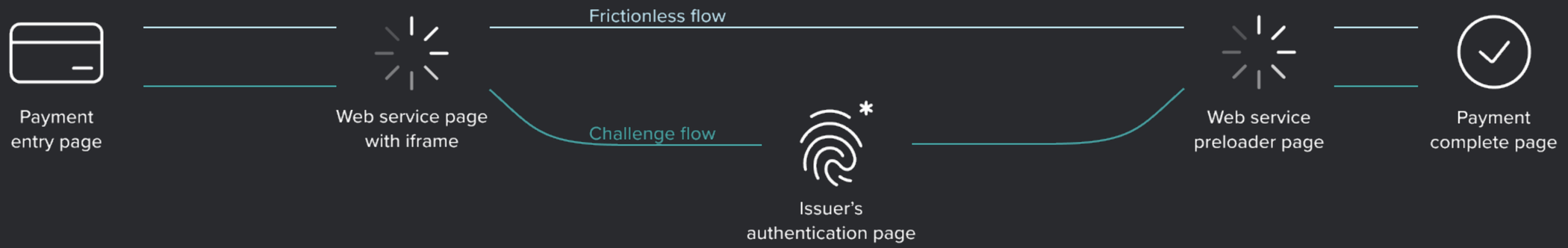
Authentication workflows Basic workflow

Sample **ECOMMPAY** preloader page.



Authentication workflows Extended workflow

The extended workflow may require no more than one customer redirect to the authentication page, but only in case the issuer selects challenge flow.



Implementing basic workflow

To implement the basic workflow:

- Contact your **ECOMMPAY** account manager and agree on the implementation time and schedule.
- Replace the payment schemes logos on your payment pages.
- Implement the workflow in close cooperation with the **ECOMMPAY** support service specialists.

It is also recommended to do the following:

- Implement submission of additional customer information, to increase the probability of selecting the frictionless flow.
- Implement processing of the new callback parameters to retrieve the information about completed authentication operations.

Implementing extended workflow

To implement the extended workflow:

- Contact your **ECOMMPAY** account manager and agree on the implementation time and schedule.
- Replace the payment scheme logos on your payment pages.
- Implement the new customer redirection algorithm.
- Implement submission of the new parameter with authentication result information.
- Implement the workflow in close cooperation with the **ECOMMPAY** support service specialists.

It is also recommended to do the following:

- Implement submission of additional customer information, to increase the probability of selecting the frictionless flow.
- Implement processing of the new callback parameters to retrieve the information about completed authentication operations.

Additional customer information

Regardless of the authentication workflow, to increase probability of selecting the frictionless flow,

it is recommended that merchant collects and submits additional information about the customer, such as:

- Home and work phone numbers
- Details of the customer account with the web service
- Delivery method and delivery address
- The previous authentication session details

For more details information about additional user information, see our documentation.

Usefull links

- Technical documentation about 3-D Secure 2 supporting by the **ECOMMPAY** platform:

  https://developers.ecommpay.com/en/en_3ds2_about.html

- EMV® 3-D Secure (3-D Secure 2):

  https://www.emvco.com/emv-technologies/3d-secure/

- Payment Service Directive 2 (PSD2):

  https://ec.europa.eu/info/law/payment-services-psd-2-directive-eu-2015-2366_en

3-D Secure 2

If you have any questions, please do not hesitate to contact the **ECOMMPAY** specialists.