

# **OPENOTP API WSDL**

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## OpenOTP API Description

The OpenOTP authentication service is implemented over the SOAP/XML and RADIUS APIs. The SOAP/XML API is provided with a SOAP WSDL service description listed below. The OpenOTP API is very simple and provides 4 methods:

### 1. openotpNormalLogin and openotpSimpleLogin

These methods are used to send an authentication request.

The request contains the following attributes:

- > username: User login name (mandatory).
- > domain: User login domain (optional if OpenOTP as a default domain setting set).
- > IdapPassword (openotpNormalLogin): User LDAP password (mandatory if OpenOTP login mode setting is LDAPOTP or LDAP).
- > otpPassword (openotpNormalLogin): One-time password (optional and usable only with Token OTPs).
- > anyPassword (openotpSimpleLogin): LDAP password or one-time password.
- > client: Client identifier (NAS) to be used in service logs (defaults to the client IP address).
- > source: IP address of the end user system (optional).
- > settings: List of OpenOTP settings which will override the user/group/application server-side settings (ex. *LoginMode=LDAPOTP*, *OTPType=SMS*).

The response contains the following attributes:

- > code:
- > 0 means an authentication failure.
- > 1 means an authentication success.
- > 2 means an authentication challenge.
- > message: The server reply message to be displayed to the user. With code 2, the message contains the challenge message.
- > session: With challenge, this is the session ID to be passed in the openotpChallenge request.
- > timeout: With challenge, this is the remaining session time to send the challenge response.
- > data: This attribute contains the ReplyData set in the LDAP user or group settings.
- > u2fChallenge: The list of U2F challenges in the form <JSON Challenge 1>,<JSON Challenge 2>.

With Radius, the data can be used by rule-based policies on a RADIUS VPN client for example.

In that case, OpenOTP RadiusBridge will return this data in a Filter-Id RADIUS attribute. In OpenOTP versions equal or greater than 1.0.9, the openotpChallenge SOAP method includes the username and domain fields like in the openotpLogin method. This simplifies authentication programming in web applications as the developers do not have to ensure that the credentials passed via hidden fields in the challenge login form have been altered or not. Before, if a challenge-response was returned after an openotpLogin call, the website had to store the username and domain because it cannot trust this information when passed via hidden fields in the challenge HTML form. They can be altered on the client side before being posted again.

Now the openotpChallenge method requires the same username and domain as those given in the openotpLogin method. OpenOTP will also succeed only if the username and domain are identical in the openotpLogin and openotpChallenge. The website can also start a PHP session and use the information gathered by the hidden fields securely to get the user identity gathered in the first login form.

#### 2. openotpChallenge

This method is used when the openotpLogin returned a challenge (code 2). This is the second request to be sent containing the user one-time password.

The request contains the following attributes:

- > username: User login name (mandatory).
- > domain: User login domain (optional if OpenOTP as a default domain setting set).
- > session: The session ID returned in the openotpLogin response.
- > otpPassword: The user one-time password (i.e. challenge response).
- > u2fResponse: The U2F response in JSON format (U2F challenge response).

The response contains the following attributes:

- > code:
- > 1 means authentication success.
- > 0 means authentication failure.
- > message: The server reply message to be displayed to the user.
- > data: See openotpLogin response above.

#### 3. openotpStatus

This method is used to query a server status.

The request does not contain any attribute.

The response contains the following attributes:

- > status:
- > 1 if the server is willing to accept requests.

- > 0 if the server cannot accept new requests.
- > message: The server status details.

#### Note

The otpPassword attribute is usable in an openotpLogin request only with OATH HOTP onetime password. In this mode, the user can generate and enter the OTP in the first request (which is not possible with SMSOTP or MAILOTP).

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