OPAALI PLATFORM

FREQUENTLY ASKED QUESTIONS, version 5.0

June 2017

New Opaali portal address: https://developer.opaali.telia.fi

New Opaali API address: https://api.opaali.telia.fi

Old Opaali portal address: https://developer.sonera.fi

Old Opaali API address: https://api.sonera.fi

OPAALI PORTAL

Q: Why Registration link to Opaali portal does not work currently in portal, HTTP Operation Forbidden error is shown?
A: Migration project is ongoing during year 2017 and direct user registrations to Opaali Portal are temporary disabled. If you click the link "Register" it will open the page with error text "Operation Forbidden". Opaali support team is migrating all existing CGW partners and also creating new partners to new Opaali Platform. Account details will be sent to the technical contact persons. If you need to register with new account, please contact opaali-tuki@teliacompany.com

Q: Where to find technical documention of Telia's OMA REST API interface?
A: Technical documents and user guides of Opaali Portal can be downloaded from Opaali portal: https://developer.opaali.telia.fi/resources.

There you can find User Guide for Opaali Portal, API documents for Sandbox, Messaging, Payment and OAuth2 and also quick guide for creating Application in Opaali Portal, Telia Mobile Messaging service description.

Q: How can we get technical help with the use of Opaali Portal and with the OMA REST API interfaces?
A: Please send your questions to opaali-tuki@teliacompany.com

API / FIREWALL

Q: Is api.opaali.telia.fi in public network?
A: Yes it is. Only if your callback URL for notifications uses non-standard port, please request firewall opening from Opaali support team. If you want to use any other port than 80/8080 or 443/8443, please contact opaali-tuki@teliacompany.com first. Non-standard port need to be whitelisted in the firewall.

Q: How to verify connection to api.opaali.telia.fi?
A: Use command ”openssl s_client -verify_return_error -connect api.opaali.telia.fi:443”, this should return ” Verify return code: 0 (ok)” when connection is established.

AUTHENTICATION

Q: Access-token has a timeout. Is it so that access-token has to be retrieved again and again?
A: Access-token is valid only a defined period (currently 10 minutes). Access token must be updated so that safe authentication can be guaranteed.

Q: Do we need worry about access token when receiving messages and delivery notifications if we are using callbacks?
A: Access-token is required only when applications are sending API operations

Q: Access token is needed when we are sending messages and doing payment reservations?
A: Yes, Access Token use is needed. Basic Authentication is supported only for limited period of time.

Q: Does each short number have it's own access token?
A: If service provider has configured more than one short number for one application in Opaali, same access token can be used for all short numbers.

Q: Does different applications have different access tokens in Opaali?
A: Access token is application based in Opaali

Q: Can we have several simultaneously valid tokens?
For instance, we request token1, then token2 and MT is sent with token1. Won’t the token2 invalidate token1
Unfortunately Sandbox doesn’t let us test these scenarios, since MTs are sent with Basic authorization instead of Bearer authorization.
A: No - One application can have only one active token in any given time. Requesting a new token automatically revokes any previous tokens created using the same credentials

Q: Is there a limit of simultaneously active tokens for an application (unique pair of login/password)/partner?
A: Only one token is allowed per application.

SANDBOX

Q: Is charging events activated for messages in sandbox mode?
A: No it's not. Sandbox is only simulator and charging events are not generated in sandbox mode.

Q: Is @ default keyword supported in sandbox mode same way than in production mode?
A: @ keyword is not fully supported in sandbox mode, @ keyword can be only used dynamically in production mode when whatever keyword message sent to your short code will be routed to your callbackURL. With MO sandbox feature you need to define exactly the keyword in API request to get succesfull response, in this case you need to setup @ keyword inside OutboundMessageRequest.message element. You can't use whatever keyword in sandbox when notification callback is configured with @ keyword.

Q: How to test MO messaging and polling of MO messages in Sandbox?
A:
1) Create Short Code / Keyword / Poll type of notification for your application in Opaali portal.

2) Send OutboundMessageRequest API request as instructed in document API TELIA OMA SANDBOX REST, chapter 3.3 "Mo Messaging Sandbox". Use your Short Code of your application in "address" field and your keyword in "message" field of OutboundMessageRequest.

3) Poll your MO messages used in previous step 2) with "**InboundMessageRetrieveAndDelete**" API request, where "registration id" is the application ID of your Opaali application. You will find this from Opaali Portal "Manage Notifications" page. MO messages are returned to your client application from sandbox mode.

MOBILE MESSAGING / MESSAGING INTERFACE

Q: Is multipart SMS message sent as one inboundMessage element?
A: Opaali combines multipart SMS messages into one message which is delivered to service provider

Q: In what format are messages delivered when user has added emoji characters into the message?
A: Messages sent by user in UCS-2 format are converted to UTF-8 before forwarding them to service providers

Q: How does Opaali handle sessionId in chargeable Query-Response applications?
A: Opaali does not have sessionId as in CGW. But there is a similar technical implementation based on applicationId and MSIDN for Query-Response applications. The difference to CGW is also that charging will happen with MT message, so sessionId is not required.

Q: If service provider wants to fetch messages from operator, how long are the messages kept in the buffer? Is the buffer configured per short number, per service provider or are all in the same buffer?
A: MO messages will be stored in the buffer until they are fetched. When the message is fetched it will removed from the buffer. Buffer is short number based, identifier to be used in fetching messages is the notification ID which has been created for the application. This can be seen from the application management under notifications.

Q: If we using Push notification URL and for some reason service provider's notification service does not respond to notification, what happens to the incoming MO message?
A: If service provider's service does not respond to notification for some reason (error/timeout), user will get "Service you requested is currently unavailable" message to the mobile phone.

Q: How long is the status of the sent message kept in operator system?
A: Status of the sent or received message is kept three (3) days in Opaali.

Q: What is the maximum number of characters that can be used in alphanumeric sender?
A: Maximum amount is 11, Telia SMSC does not support higher amount of alphanumeric characters in senderName

Q: From where can service provider see the actual amount of traffic to application?
A: The actual traffic towards application can be seen from service provider reports in Opaali portal. For example, choose CountsPerApplication, CountsPerOperation and the desired format of the report (HTML, CSV, XLS or PDF).

Q: When using multipart SMS messages, do the reports show the correct amount of sent messages?
A: With multipart SMS messages, it is not yet possible to see from reports that to how many parts was the message divided. QueryDump report does displayed detailed information about individual messages which show the length of message for example.

Q: Are Flash messages supported?
A: Yes, use outboundSMSFlashMessage element when sending Flash messages

Q: Can we use HTTPS callback URL's?
A: Yes, HTTPS callback URL's are supported.

Q: Can we use non-standard port numbers in callback URL's?
A: If you want to use any other port than 80/8080 or 443/8443, please contact opaali-tuki@teliacompany.com first. Non-standard port need to be whitelisted in the firewall.

Q: What is the maximum Q of string values in API?
A: In Payment API, Following parameters are allowed maximum 255 character length.

- clientCorrelator
- code
- description
- referenceCode

In Messaging API, Following parameters are allowed maximum 255 character length.

- notifyURL
- callbackData
- description
- currency

In Messaging API, Following parameters are allowed maximum 11 character length.

- senderName

In Payment API, Following parameter is allowed maximum 20 character length.

- Currency

Other parameters have no length restriction.

Q: What is the maximum length of SMS supported? I mean, how many 160 character messages can be concatenated?
A: Maximum length of of SMS supported to MT direction is 1600 characters in Opaali platform.

Q: Can this Opaali service send SMS messages to Norway and Sweden?
A: Yes it can. When sending MT SMS messages to other subscriptions than Telia (eg. Elisa, DNA) in in Finland and also when sending to foreign countries, you should use application type **Bulk** in Opaali portal without end-user charging feature. If you use QR or PUSH type of application, message is rejected with POL3101. "subscriber is not found".

Q: If we send a premium SMS we'll first get a reply that Telia has received the message and they've accepted it, then we wait for them to call our delivery report service. If the second delivery report says "DeliveryImpossible", has the customer still been charged for the content?
A: This depends if CHARGE_ON_DELIVERY parameter is YES in Opaali Portal for partner's application. If it's YES and delivery report is "DeliveryImpossible" or anything else than "DeliveredToTerminal", customer is not charged for the premium content. Please note: Target schedule to have CHARGE_ON_DELIVERY parameter in Opaali portal is currently in the Q2 / 2017.

Q: It would be great if you could give me an accurate date for when validity time will be in place, and a date for migration?
A: Target schedule to have VALIDITY_TIMEOUT parameter in place in Opaali Portal for partner's application configuration is currently for R4.

Q: What senderAddress I should use in OutboundMessageRequest if I don't have Short Code allocated to my **Bulk** application?
A: tel:+358000000000 should be used with Bulk applications as a "senderAddress" when Short Code is not used.

MMS MESSAGING

Q: Is there support for MMS?
A: Messaging API update for MMS support is deployed in R4. New parameter outboundMMSMessage will be introduced. More information can be found from Operator Service Platform OMA Messaging REST API Guide chapter 4.

Q: What is the maximum size of MMS message?
A: The maximum size of MMS message is 1MB

Q: Is it so that Callback does not contain actual binary data and data should be fetched from the included link? How long is the link valid?
A: MMS inboundMessageNotification message contains a link and the actual MMS content will be fetched with separate GET command which used the access token. MMS attachments validity period is configurable and preliminary it is configured to be 24 hours unless the application has not retrevieved them from Opaali. After retrevival, the attachments will removed immediately.

Q: How is the MO MMS message retrieved? Should we use Nokia EAIF format or MM7?
A: Messaging API MO MMS works basically the same way as MO SMS. MO MMS can be retreived using retrieveAndDelete POST operation (pull) or activate a callbackURL (push) so that messages are delivered to a desired URL. MMS messages are delivered via Messsaging API and there are no plans to publish Nokia EAIF or MM7 protocols directly to service providers

MT MESSAGING

Q: Can we receive delivery notifications as callback?
A: Yes, you can define receiptRequest parameter with notifyURL in outboundMessageRequest operation

Q: Can we set validity time for MT messages?
A: Yes, Validity Time for messages (in minutes) can be set in Opaali. This feature will be released in Opaali Release 4 deployment. Maximum value is 4320 seconds = 72 hours.

Q: How can we send MT messages to the terminals which are other operators than Telia's subscriptions (eg. Elisa, DNA)?
A: You can sent Bulk MT messages when you have configured BULK application to Opaali. If you try to use QR or PUSH application, messages are rejected and not delivered to other oparators subscribers.

Q: What senderAddress should I use in OutboundMessageRequest?
A: Note that when you use senderAddress in message content it must match to the POST request URL senderAddress as well. SenderAddress should be used as following:

1) MSISDN number with tel: URI, this is what you want to use what your client application , format can be eg. tel:+358405501001 or 0405501001.
2) Short number, minimum 3 digits, eg. 12345 or whatever you want to use in sandbox, format can be also **short:12345**. When you move to production you can request a real short number code or use existing short numbers migrated from CGW

Q: Can there be more than one short number for one application?
A: Yes, there can be multiple short numbers and keyword combinations per one application in Opaali

Q: When creating notification in Opaali Portal, what is the maximum lenght of callbackURL address?
A: Maximum lenght of callbackURL address is 512 characters in Opaali Portal.

Q: How can I check logs for sent and received messages?
A: Overall logs can be seen from different Partner reports from your Opaali Portal account. Detailed logs for messages sent and received messages can be seen from "QueryDumpForPartner" file, in CSV format.

Q: Does Opaali have TLS 1.0 support?
A: No, TLSv1.0 support is disabled in Opaali platform. TLSv1.1 and TLSv1.2 are supported.

Q: Does NSEE support TLS SNI(https://en.wikipedia.org/wiki/Server_Name_Indication) towards application?
A: No, Opaali supports only standard SSL and does not support extended SSL for SNI.

Q: How error conditions are returned (even for single recipients). Let's say you send a premium MT to a consumer with low prepaid balance. Will the call to "outbound" return status 403 and POL1000? Or will that be returned when calling the "self-referencing URL" for transaction status? And if one "outbound" premium MT is sent to one "low prepaid" and another "everything OK" consumer – what will the HTTP status be then?
A: In case of single recipient with low prepaid balance, API will respond directly with status 403 and POL1000. In case of multiple recipients, let's say first one is succesfull and second one is with low prepaid balance, API will respond with status 202 and resource URL, including request ID. After this when you send GET delivery status request, that would respond "DeliveredToTerminal" for the first recipient and "DeliveryImpossbile" for the second one, because there is no prepaid balance for this recipient.

MO MESSAGING

Q: I have understood that we can configure MO-Callback URL which delivers the messages to configured address, content in JSON format. Does this mean that we do not have to fetch MO messages?
A: MO messages can be fetched using "InboundMessageRetreiveAndDelete" operation which is an alternate way in addition to the so called MO-Callback. You can choose to use either pull-method (Retrieve and Delete) or push-method which can be configured in portal. Later there will also be added "DeliveryReceiptSubscription" method to the Messaging API which can be used as parallel method with portal MO-callback

Q: If we can receive MO messages with callback, does Opaali support self-signed certificates or do those need to authorized by CA?
A: Certificate can also be self-signed. The notifications for both MO and Delivery Receipts are one way SSL towards the partner, so it's the partner certificate which is used in the handshake. CA certificates are supported only in the communication.

Q: Are MO binary messaging supported by Opaali?
A: OMA standard does not support MO Binary messages, but Telia is finding possible solutions to support MO binary messages in the future in Opaali as it is supported in CGW. MO binary support will be deployed to production during year 2017.

Q: Is it only possible to receive SMS MO by polling?
A: No. Also Push notifications are supported. Notifications of inbound MO SMS messages can be received in two ways from Opaali platform:

1) Polling Message Retrieval - cache and collect model. No application callback is required. The application periodically retrieves messages from the platform through the API
2) Push Notification - direct push of notifications. An application callback is required to configure to the partner's application in Opaali portal. In succesfull case callback should response with HTTP 204 to the Opaali.

Q: Can all keywords to be configured for one application?
A: Yes you can. One application can have multiple keywords per short code. In R4, maximum number of keywords per short code is 400.

CHARGING / INVOICING

Q: How about services which have price over 5€?
A: Receive-Only application pricing is defined as a configuration parameter (Receive-Only service price). In other type of applications, the price is defined by charging amount element in OutboundMessageRequest.Charging.Amount.

Charge limit in Opaali platform is 60 eur. The maximum end-user price for single service request is 60 euros by default. If your application requires event price higher than that, please select the check box in Promote to Production page and request exception for the default. For prices over 5 eur, there is not anymore confirmation logic like in old CGW platform.

Q: What about 0% VAT services?
A: VAT 0% can be configured per application if needed. VAT < 24% for Application will need manual approval from Telia administrator in Promote-to-Production phase.

Q: Does the price which has to be mentioned for each application ("receive only price") have to be entered gross or net? We're assuming net as VAT has separately to be stated. Correct?

A: Yes, price mentioned is net, exluding VAT. VAT value will be filled in promote-to-production form, when selecting application bundle type and will be configured in Opaali invoicing system for your services. Please note “receive-only price” is used only with Receive-Only type of application, if selected in promote to production phase.

Q: What should we put as a application bundle type for our services in when billing is on MT, and not on MO, for premium services?
A: When customer billing with premium services is done in MT, you should select **QR with Charging** or **PUSH with charging** type of application for premium messages. QR means you can sent only one reply MT message, with PUSH you can send multiple premium MT messages to the customer, until customer stops the service by sending STOP keyword to your service. This STOP feature will be available in Release 4 of Opaali.

Basic principle when selecting application type is, if there is *_*with_charging*, this means premium messaging. *Bulk* and *_*no_charge* means your customer (enduser) billing is not used, meaning bulk messaging**.** Note: **Receive Only with Charging** is the only application type where premium MO billing is done to the customer.

Q: Is the “amount” parameter for OutboundMessageRequest defined incl or excl VAT?
A: “amount” parameter value in OutboundMessageRequest.Charging element is defined excluding VAT. VAT will be configured for your partner id(s) applications in Opaali invoicing system for informative purposes. VAT value is then configured to Telia's rating and invoicing system for your applications.

MOBILE PAYMENT

Q: Is usage of acr:URI (encrypted MSISDN) supported in Payment API currently?
A: Opaali does not support yet fully usage of acr:URI. Propably during next year 2017 there will be support of stronger encryption mechanism with initial vectors and secret keys in Opaali platform. Currently solution is that you should use the mobile charger **/service/pay payment path** as so far with old CGW system, but when you will send Payment API requests to Opaali API, you should use enduserId MSISDN as tel:URI format, acr:URI is not supported.

Q: We are currently using CGW based Mobile Charger. Is there a description how it works in Opaali?
A: You can find the description of end user mobile charging service in Opaali from portal resources page.

Q: How long can we wait between making the "Reserve" and the "Charge" calls in the Payment API?
A: A reservation expires after 24 hours. Charge call for the reservation has to be made within 24 hours

Q: Can you please give us more info about service groups I-IV so we can select correct group for our services? What kind of services can be connected in each group? What are the restrictions?
A: Service barring rules are applied with Mobile Charger services as with traditional SMS services. Mobile services are generally divided in 4 groups:

Service Group I – Services of General Interest (ex. taxi services)
Service Group II – Transaction Services (ex. General number services and charity events etc.)
Service Group III – Entertainment (ex. tv-vote and chat services)
Service Group IV – Adult Services (ex. All kind of adult services)

By default subscriber (MSISDN) does not have any service barring activated in subscriber database and all SMS and Mobile Charger services can be used.

When Barring value is set to the subscriber, then there are restriction rules, depending of what kind of application restriction class (Service Group I-IV) you have set for your payment application.

If:

Subscriber barring value blank --> All Service Groups I-IV are allowed for this subscriber

Subscriber barring value P1 --> All Service Groups I-IV are barred for this subscriber

Subscriber barring value P2 --> Service Group I is allowed, Service Groups II, III and IV are barred

Subscriber barring value P3 --> Service Group I and II are allowed, Service Groups III and IV are barred

Subscriber barring value P4 --> Service Group I, II and III are allowed, Service Group IV are barred

Ex. Subscriber MSISDN has barring value P4, he can't use Service Group IV - Adult services, but he can use all the other Service Groups, for example ordering a taxi or sending a vote to a TV-program show.

PROMOTE TO PRODUCTION

Q: We would like to migrate one Short Code and one only to production to verify the set up in general. Is this possible?
A: Yes, this is possible. We can migrate first one Short Code for your application in Opaali portal. You can choose if you want to use first test short code for testing purposes or migrate one of your existings short codes to Opaali. This need to be then configured to the Telia SMS center with agreed schedule and after the switch is done in SMS center, MO traffic with that number is not anymore routed to the old CGW platform.

Q: We have 34 receive only services (with charging) and one send only service to provide replies. Our understanding is that we'll be requesting the promotion one by one. What is a realistic time frame for such migration since it involves your approval?
A: There are certain rules in promote-to-production process. First application always needs manual approval from Telia administrator, but subsequent applications might be promoted automatically to the production mode. It depends on the partner authorization level, if payment act law is selected or not, do you request any special change to the bundle etc.

Q: Checkbox “Request change to bundle” – what does it mean? I know this is explained in the guide but it’s not 100% clear to us unfortunately.
A: : “Request change to bundle” can be filled if you would need some other configurations for your application, except default configuration. Ex. Here you could request change to charge limit, destination address blacklist, maximum transactions/revenue per interval, or if you would like to restrict some feature, ex. setting amount split transaction for payment transactions to FALSE. Usually by default you don’t need to request any specific changes.

PERFORMANCE / CAPACITY

Q: What Is the maximum rate of messages allowed per second for MTs via the Opaali interface?
A: Default is 10 transactions per 1 second (10 TPS). Please request values you may want to use with your application, we can configure less strict limitations for your application, if needed or based on the SLA's. With high peaks we recommended to user timers, loops and burst type of sending with mass traffic.

Q: What is the maxium number of destination addresses in one OutboundMessageRequest API request.
A: Maximum number of destination addresses should be based to your TPS contract. Ex. If you have 10 TPS contract, max. 10 destination addresses can be send in one OutboundMessageRequest.

DELIVERY INFO NOTIFICATIONS

Q: Is there retry mechanism for notifications if our callback does not respond with HTTP 204 response within 10 seconds to the DeliveryInfoNotifications send from Opaali?
A: Yes there is. If partner callback has some error due timeout, invalid URL, TCP/IP errors, notifications are placed to internal retry database in Opaali platform and retry mechanism logic is triggered periodically for trying to deliver the failed notifications to the partner callback.