IT Requirements - enmacc

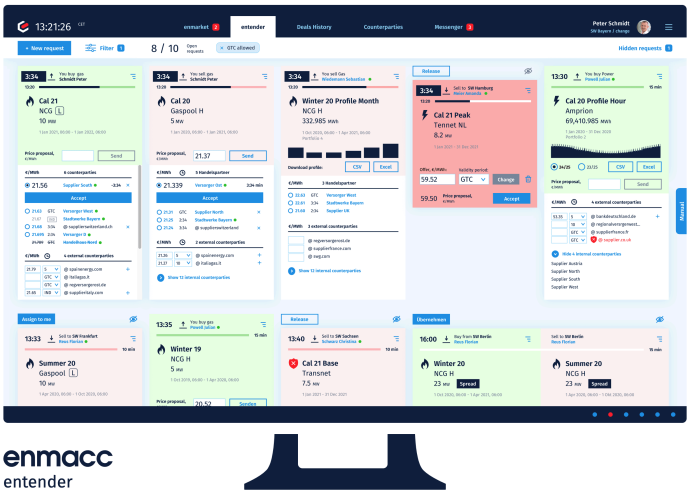
Info: **Please send this fact sheet to your IT department prior to using the enmacc platform in order to avoid technical problems**

Outline

About the platform

enmacc is an OTC energy trading platform for Power, Gas, and environmental products. It is used via a web browser or mobile application (iOS & Android).

- Price negotiations for standards and non-standards in real-time
- Trading mechanisms:
  Request For Quotes (RFQ) or
  Central Limit Order Book (CLOB)
- User permission management
- Credit risk management
- Optional anonymous trading
- Spread requests
- Internal chat messenger
- API for a variety of use-cases



Enmacc is a cloud-native platform and runs on Amazon Web Services located in Frankfurt, Germany.

More information about the platform is available at https://enmacc.com

Browser support

The browser-based platform can be used without the installation of applications or plugins. enmacc uses **HTML5 notifications** and the **HTML5 local storage**.

Enmacc supports the following browsers:

- **Google Chrome: v. 107 and newer**
- **Mozilla Firefox: v. 107 and newer**
- **Microsoft Edge: v. 107 and newer**

Be aware that browser plugins and extensions, like translators or ad blockers can impact functionality of the platform. We recommend not to use those on the platform.

Info: Support for Internet Explorer 11 has been discontinued due to security and feature issues. The browsers Safari and Opera are also not supported.

Firewall & Web Security configuration

The platform uses **Server Side Events (SSE)** and pusher.com to push updates to the browsers and uses encrypted communication via **HTTPS (TLS 1.2 & TLS 1.3) and WSS**.

Configure firewalls and proxies to allow traffic from the enmacc.com domain with all possible sub-domains (*.enmacc.com) for both protocols, HTTPS and WSS. Additional subdomains will be introduced in the future. A full list is available below.

Info: Please make sure to permit traffic for all HTTP request methods: GET, HEAD, POST, PUT, DELETE, OPTIONS, PATCH

HTTPS protocol *(tcp, Port 443)*:

Enmacc domains	Third Party Domains
enmacc.com • https://enmacc.com ***.enmacc.com** • https://**www**.enmacc.com • https://**trading**.enmacc.com • https://**gw.trading**.enmacc.com • https://**chat.trading**.enmacc.com • https://**sse.trading**.enmacc.com • https://**ffp.trading**.enmacc.com • https://**dap.trading**.enmacc.com • https://**hermes.trading**.enmacc.com • https://**enlytics**.enmacc.com • https://**connect**.enmacc.com • https://**ensights.trading**.enmacc.com • https://**auth.trading**.enmacc.com • https://**ld-ff.trading**.enmacc.com	***.hotjar.com** • https://**script**.hotjar.com ***.hotjar.io** • https://**content**.hotjar.com ***.fidectus.com** • *https://**gen**.fidectus.com* ***.amazonaws.com** • *https://**s3.eu-central-1**.amazonaws.com*

Additionally, enmacc makes use of the **secure Websocket protocol WSS** for real-time updates. Please permit the websocket protocol by your firewall and web security tools for the following domains:

Secure Websocket protocol *(wss, Port 443)*:

Enmacc domains	Third Party Domains
***.enmacc.com** • wss://**ws-chat.trading**.enmacc.com • wss://**dap.trading**.enmacc.com	***.pusher.com** • wss://**ws-eu**.pusher.com ***.hotjar.com** • wss://**ws**.hotjar.com

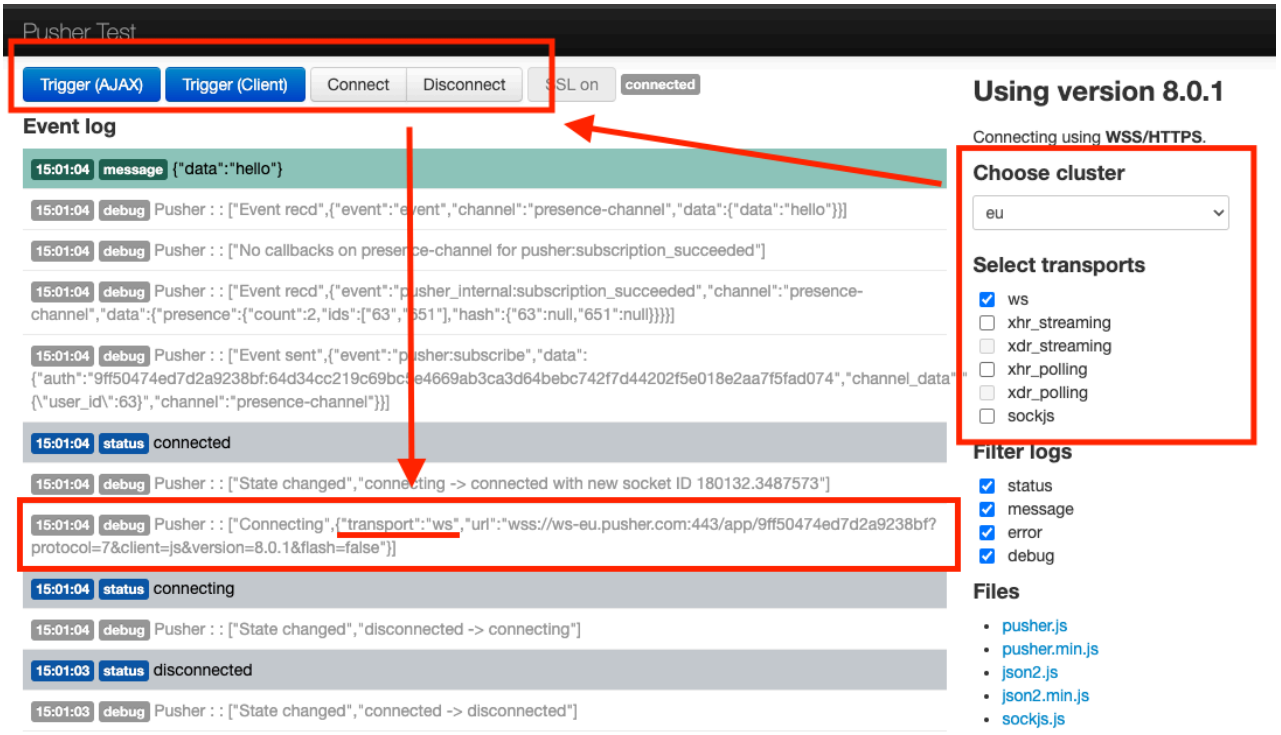
The domain **enmacc.de** is not used anymore by the enmacc platform and a redirect is implemented (301 Moved Permanently) to the **enmacc.com** domain.

→ *trading.enmacc.**de*** forwards to *trading.enmacc.**com***

Verifying availability of the pusher websocket

The availability of the **pusher.com** service is critical for the usage of the enmacc platform. The pusher test website can be used to verify if the service is available.

1. Go to https://test.pusher.com/?env=eu
2. Choose the **EU cluster**
3. Select only the transport mode: **ws**
4. Click **Disconnect** then **Connect** then **Trigger (AJAX).**
    a. The message should be successfully sent
    b. The connection needs to be established via **"transport":"ws"**
5. If you encounter an error verify your settings according to the section above for ***.pusher.com** *(wss, Port 443)*



Platform update strategy

enmacc rolls out platform updates on a weekly schedule. To guarantee the best experience the browser must run the latest available platform version.

New versions are loaded through a simple browser refresh or through the automatic version update strategy:

1. The client periodically triggers HTTP HEAD requests to https://trading.enmacc.com/index.html
2. The response includes a **x-enmacc-tag** header, e.g. **version-25cw23-36c4f815**
3. If the client detects a version change the **version update banner** is triggered that allows the user to refresh the application

Appropriate caching strategies are in place to allow browser based caching.

Caution: Avoid proxying or caching strategies that circumvent enmaccs' caching configuration, to allow the automatic platform update to work.

Mailing

The enmacc platform sends transactional and information mails through an AWS hosted email server. The following well-known security best practices are implemented by enmacc to guarantee secure email delivery:

- Domain Keys (DKIM) signature
- Sender Policy Framework (SPF)
- Domain-based Message Authentication, Reporting, and Conformance (DMARC)
- Brand Indicators for Message Identification (BIMI)

Whitelist or update your SPAM settings to allow incoming mails from **enmacc.com**:

- no-reply@enmacc.com
- tradingplatform@enmacc.com
- billing@enmacc.com
- info@enmacc.com

Billing

Our invoices are sent as **PDFs** in an email via the mailbox billing@enmacc.com.
Please adjust your filter settings accordingly.

API

Enmacc offers a modular HTTPS API (Application Programming Interface) to automate processes between enmacc and your trading systems. It enables, for example, an information exchange with your Portfolio Management System (PFM), Risk Management System, Pricing Tools or other (proprietary) systems to digitize and automate your energy trading processes.

The use of APIs is not a prerequisite for the successful use of enmacc.
More information about the enmacc connect API are available here:

- https://enmacc.com/energy-trading/automation
- https://developer.enmacc.com

Info: Besides the enmacc connect API, enmacc also provides pre-configured deal-capturing integrations to major PFM systems or customizable integrations via (S)FTP or mail. Please contact connect@enmacc.com **and ask about existing "Connect Config" setups.**

Contact

Please don't hesitate to contact **info@enmacc.com**, or call **+49 (0) 89 215 415 00**, if you have any further questions. We can also support you with a demo environment access to check for correctly configured firewall and web security tools.

Additional information security related topics can be found in the **enmacc trust center**:
→ https://enmacc.com/trust