

2nd GENERATION OF TWO-FACTOR AUTHENTICATION (2FA) FOR NASDAQ WEB SYSTEMS

EMEA/APAC: Q-port, CMS WEB, CNS, Track, NFM

US/CN: Smarts, N3A, Kill Switch, Report HQ, Member Portal, Ocean view, Infinity Portal, Q- view, Trade Info

ENROLLMENT GUIDE

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1.1 Revision history

Revision	Date	Change description
1.0	2018-09-18	Initial version
1.1	2018-12-05	Updated version adopted to fit both EMEA and US- tools
1.2	2018-12-07	Added merging description.
1.3	2019-01-02	Current login page vs New login page for existing users reference

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2 Regarding this document

2.1 Purpose

The purpose of this document is to guide the users of the Nasdaq Web Systems through the 2FA enrollment process. The process is somewhat different depending on what tool the users are using and if located on a US- server or not. See details below under "Application support". This document will be updated along with the 2nd GEN 2FA roll out during 2019.

2.2 Audience

This document is for users of Nasdaq web applications.

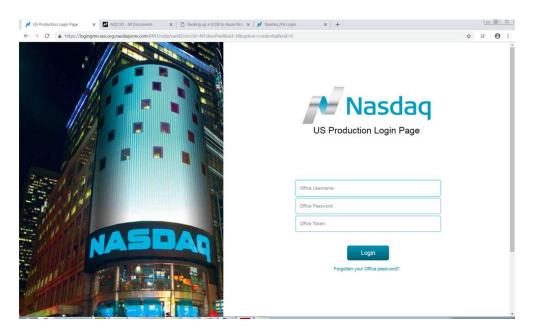
2.3 References

More information regarding 2FA can be found on 2FA webpage

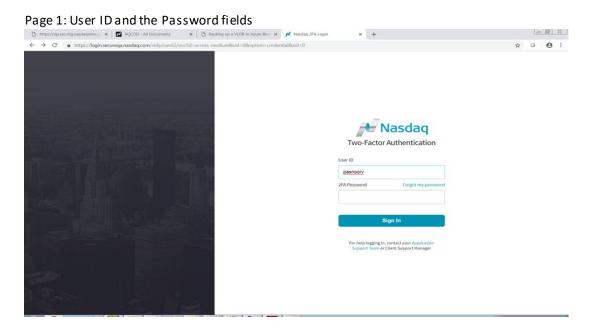
3 Enrollment preparations

3.1 Current Login Page vs New Login Page (For existing SafeNet users)

a) Current Login Page: Has a user ID, password and the token input fields before getting onto the application page.

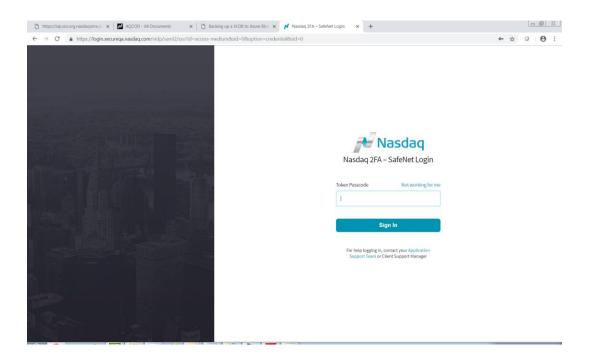


b) New Login Page: Will be split into two pages before getting onto the application page.



ii. Page 2: 2FA Token field

i.



3.2 Pre-registration e-mail (NEW 2FA accounts only)

Once a new user account in any of the Nasdaq Web Systems has been pre-registered by the manager or application owner, an e-mail containing the 2^{nd} Gen 2FA enrollment link will be sent to the users' e-mail address. Ensure you've received that before you start enrolling.

- a) **NOTE!** Enrollment link for systems installed on the non-US servers (often for EMEA / APAC- users): https://login.eu.secureweb.nasdaq.com
- b) **NOTE!** Enrollment link for systems installed on US-servers (often for US / CN- users): https://login.secureweb.nasdaq.com

Click on the enrollment link (should differ depending on where the tool using is installed, US or not) provided in the e-mail in order to proceed to the **Service Center** for 2-Factor Authentication (2FA) portal.

NOTE! The registration link is valid during seven (7) days and can be used once only.

For help at any stage of your enrollment phase and after (to get help with setup, password reset, settings etc.), please contact:

EMEA/APAC: Q-port, CMS WEB, CNS, Track, NFM

Technical support- team, technicalsupport@nasdaq.com, +46 8 405 6280

1. US/CN: Smarts, N3A, Kill Switch, Report HQ, Member Portal, Ocean view, Infinity Portal, Q-view, Trade Info

Market Operations - team, marketops@nasdag.com, +1 212 231 5180

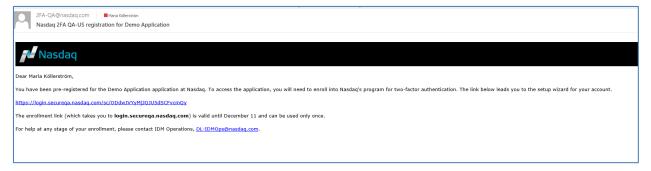


Figure 1 – the registration e- mail with the enrollment link! Note that the above mail is connected to a DEMO environment and the link in fig. 1 is not identical to the one that will be sent out from the production environment! The correct link provided to you will be comparable to the links above in listing 1 and 2.

3.3 Service Center

For new 2FA users, Two-Factor Authentication (2FA) Service Center page contains an overview of the 2FA enrollment process. Click on the onboarding bar at the bottom of the page in order to proceed with the next step in the enrollment process.

NOTE! Users previously enrolled to SafeNet MobilePASS can enroll to alternative methods from the menu (SMS, Voice PIN, etc.) on the left side of the page.

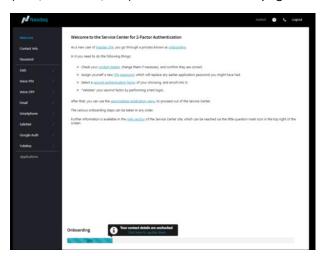


Figure 2 – Service Center before enrollment start (see onboarding progress at the bottom of the screen as well as your next step)

3.4 Enter Contact information

The Contact Information view shows the account owners 2FA Username, First and Last name and the e-mail address associated with the account, must be a personal preferably your company e-mail.

Add your cell-and/or desk phone number and press Save.

NOTE! If you have another 2^{nd} GEN 2FA account already registered for another application, please make sure to follow the **procedure described in chapter 5!**

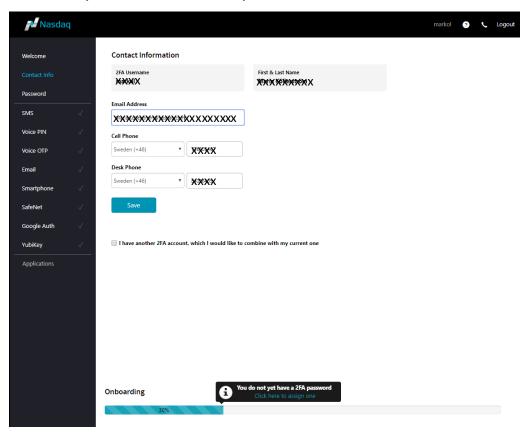


Figure 3 – Contact Information view

3.5 Set 2FA password

In order to set a new 2FA password, press Set- Press Change if you already entered a password and want to change it.

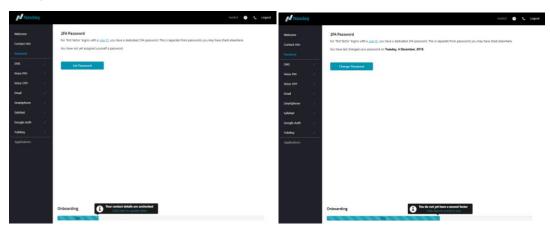


Figure: 4 and 5 - 2FA Password view to set new password and Change already set password

4 Enroll preferred Second Authentication factor (2FA)

On the Second Authentication Factors - page choose second factor(s) that you want to enroll. Simply click on the link for the chosen method in order to proceed. Once a method is enrolled and validated the check mark next to it in the left hand side menu will turn green!

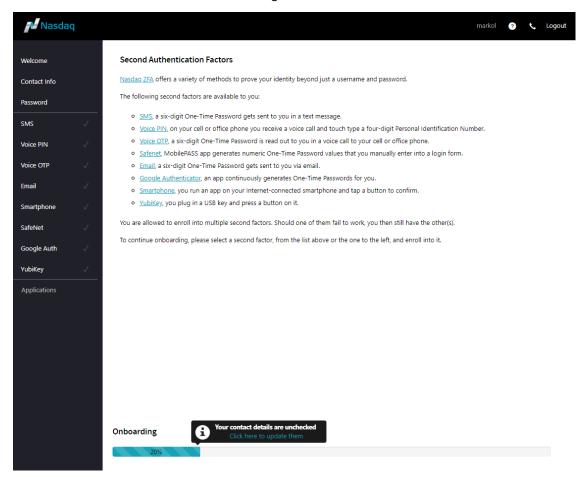


Figure 6 – Second Authentication Factors available – notice all methods in the left hand menu (not all methods are available for all applications)

4.1.1 Enroll 2nd 2FA method – SMS

At login, you will receive a SMS with a One-Time Password for Nasdaq 2FA Number.

NOTE! Don't forget to tick the **preferred method**-box if this is the preferred way for you to authenticate.

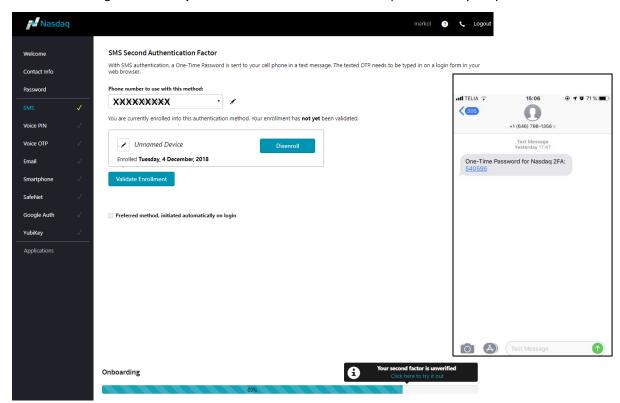


Figure 7 and 8 – Second Authentication Factors (2nd 2FA): SMS and the generated One- Time password via SMS. Notice the yellow check mark next to chosen method, SMS in this case. This is not turned to green until you have validated your account so make sure you don't miss that step to be able to actually use it!

4.1.2 Enroll 2nd 2FA method– Voice PIN

At login, you will receive a phone call asking you to enter your Personal Identification Number (PIN), followed by a hash (#) on the keypad.

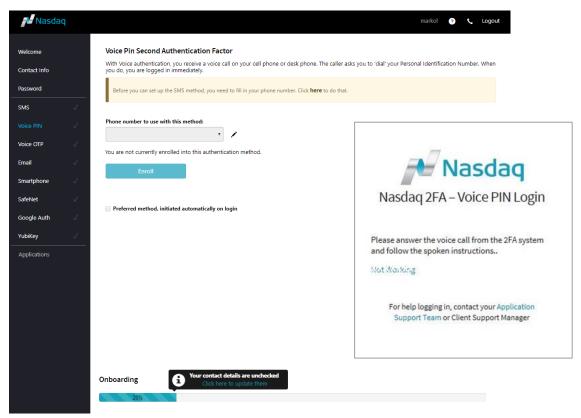


Figure 9 and 10 – 2nd 2FA method Voice PIN (Note! Before you enroll, enter a phone number!) - And the pop-up screen informing the user about getting a phone call with the Voice PIN login.

4.2 Validation of the 2FA method IMPORTANT STEP

To ensure the enrollment has been completed, you must validate the enrolled 2FA method.

Press **Validate Enrollment** on the chosen method view. If this method is preferred for future logins, you can opt for it on this page.

Not until the method has been validated the check mark next to it, in the left hand-side menu, will turn green proving the method being ready to use!

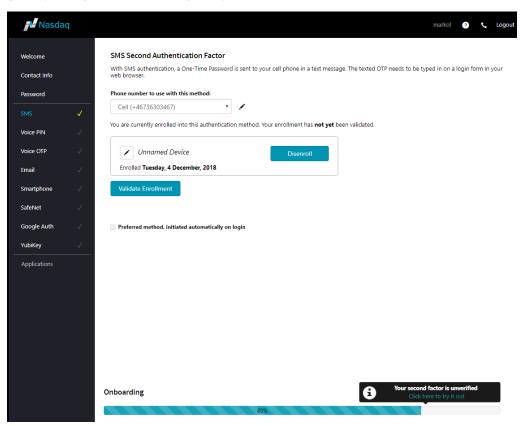


Figure 11 – Validation screen of the 2FA method – onboarding now 80%...

4.3 Validated 2FA method IMPORTANT STEP

Once you've validated your chosen authentication method, the onboarding is completed 100% (see progress bar). You may now choose to start using your Nasdaq Web systems/applications or continue to enroll another method.

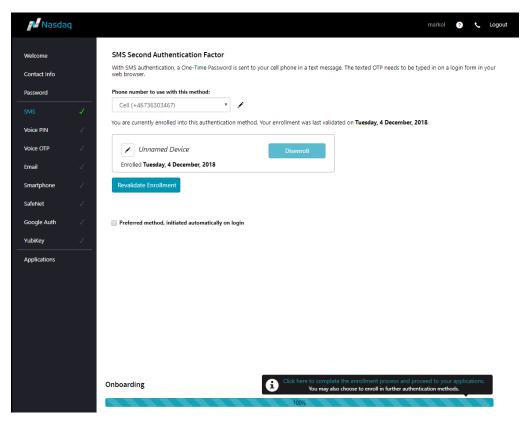


Figure 12 – Validation of the 2FA method – onboarding now completed 100%

5 Merging of 2nd GEN 2FA accounts

If you have multiple 2FA accounts, for example because you are enrolled into multiple Nasdaq Web Systems/applications, you can **merge these 2FA accounts into one 2FA account** once the enrollment method have been setup for the new application. This will **not** affect your application accounts.

This means that you can use one single 2FA account to authenticate into multiple applications.

5.1 Before merge

When you are offered to merge multiple accounts into one, you usually have multiple 2FA accounts, each with their own login identifier ("username"), password and 2FA methods. But as the number of application accounts grow, you probably do not want to manage separate 2FA accounts for each application. To simplify this, you can choose to start a merge process in ServiceCenter.

5.1.1 First account

To be able to merge your accounts, make sure already have an account that is working by login into it-depending on method chosen, login page it can look similar to below...

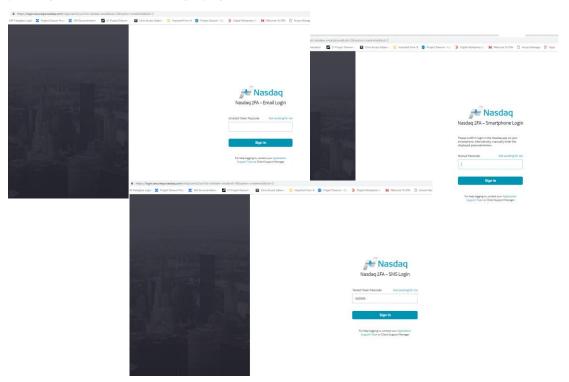


Figure 13, 14 and 15 – 2nd GEN 2FA login pages for Email, Smartphone and SMS Login

5.1.2 Setup of a second 2FA account

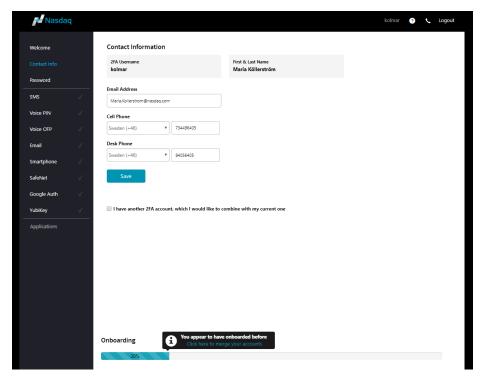
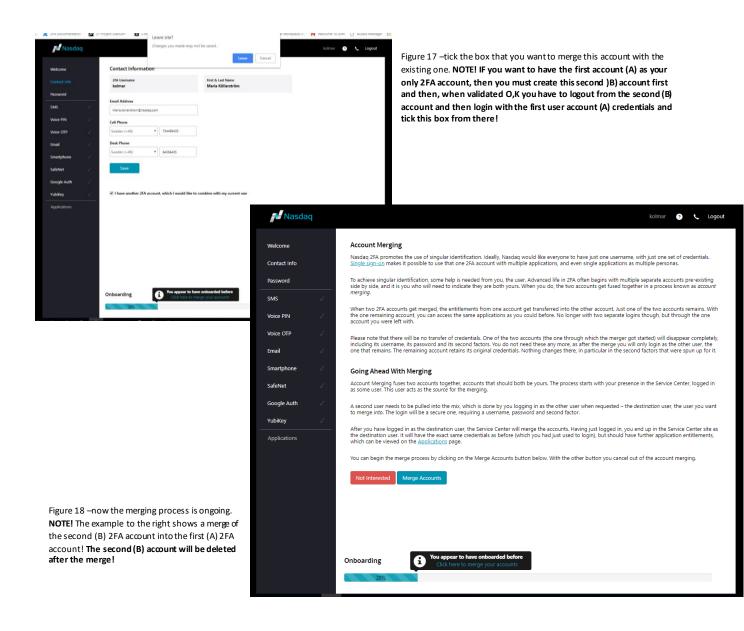


Figure 16 – Setup of a second (B) 2FA account (soon to be merged into the first one already setup)

5.2 During merge (second (B) 2FA into first (A) 2FA account)

After you started the merge process, you will be asked to authenticate again with the account you want to merge **into**. Let's assume you start the merge process from account **B** (2nd account in this guide) and merge into account A (first account setup in this guide). When you do that, the following happens:

- All your application accounts from account B will be added to account A
- All your second factor enrollments from application account **B** will be **deleted**
- All the second factor enrollments of account **A** will still be available



5.3 After merge completed

At this point, only account **A** will exist, with all of its previously enrolled second factor methods and application accounts it had before, as well as all application accounts that used to be on account **B**.

This means that it is important that you make sure to start the merge process from the account you no longer wish to use!

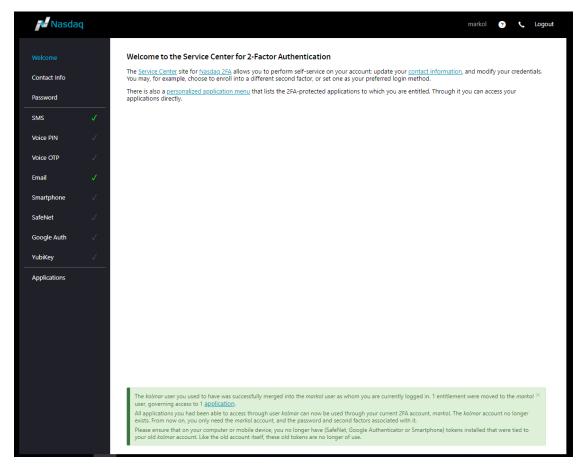


Figure 19 — now the merging process is completed and the first 2FA account is now supporting two Nasdaq Web Systems/applications with secure login!

6 Support

6.1 2FA

For 2FA issues during enrollment and after (to get help with setup, password reset, settings etc.)

EMEA/APAC

Q-port, CMS WEB, CNS, Track, NFM

Technical support- team technical support@nasdaq.com

+46 8 405 6280

US/CN

Smarts, N3A, Kill Switch, Report HQ, Member Portal, Ocean view, Infinity Portal, Q-view, Trade Info

Market Operations - team marketops@nasdaq.com +1 212 231 5180

6.2 Nasdaq Web systems/Applications

For issues with the application using 2nd GEN 2FA as authentication method, contact Application Support Team or Client Service Manager

EMEA/APAC

Q-port, CMS WEB, CNS, Track, NFM https://login.eu.secureweb.nasdaq.com/sc/contact

US/CN

 $Smarts, N3A, Kill Switch, Report HQ, Member Portal, Ocean view, Infinity Portal, Q-view, Trade Info \\ \underline{https://login.secureweb.nasdaq.com/sc/contact}$